Notes on the Lectures of Dr. Benjn. S. Barton

Professor of

Materia Medica

Natural History

and

Botany in the University of Pennsylvania

Taken by

Thos. D. Mitchell

1809–10

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V

Xanthoxyla 157

10

Lycium 257
Zanthoxylon 393

White Walnut 437

Wine Whey 290

Whey of Alum 107

11

Phosphate of Mercury 411

Materia Medica is that branch of Science which investigates the nature of Medicines and their proper use in different diseases —

+ This has been useful in increasing our knowledge of the utility of medicines —

By Chemical analysis I can determine what part of Opium is the active — whether the Gum or Resin — it is the latter —

Lecture 2d — November 10th 1809

The arabians first used the Cathartic aloes - The use of Mercury in the venereal disease is derived from Arabia - They were not good anatomists nor Physiologists - they wrote on the pulse and vision - they knew something of galvanism and of vegetable physiology —

November 14th 1809

An enquiry to ascertain the medical properties of certain article - Man is irresistably compelled to seek the necessities of life - In all countries persons have been acquainted with classes of vegetables which they used in diseases - I divide my analysis of medicinal bodies into 1st Their chemical examination - 2 Their botanical affinities 3 Their sensible qualities 4 Lastly experience in the use of them - on each of these I shall make some remarks - I shall consider the doctrine of signatures to medecine previous to entering on my propositions - cursory observation viz

according to Indian opinions

He who feeds on venison is more swift than he who feeds on bears or fowl - some savages will not let their children touch a mole because it is blind, lest the children should lose their sight -

1st Chemical Affinity - The study of Chemistry is important to Materia Medica - its progress will advance the latter science - To discover the properties of medecine, we can employ what is called Resolution - that is a process in which the properties of the simple substances are not destroyed - by such means we may find what Cullen calls a virtue and we may even find a new medecine - The resin of opium is not purgative - so that we need not suppose all resinous medecines to be purgative -

Davy tried to analyse Foxglove - though its analysis seemed be of no profit yet I should like to see it - In the Peruvian Bark, a principle has been found which Chemists call Chinconin - to this principle the bark owes its virtues —

The liquid amber yields a resinous liquid amber, the quantity of which differs materially in different trees —

Chemical analysis cannot be very advantageous in practice —

2. Botanical affinity — This is necessary in the study of Materia Medica — by botanical affinity I mean that similarity which subsists between different vegetables in their flower and fruit — The affinity between different plants being established, it was thought that plants which resembled each other in flower or fruit must be possessed of the same medicinal virtues, — it is certain that botanical affinity is necessary in the investigation of the powers of medecines — Of much for the physiognomy of plants — in Chemical results plants agree greatly — Botanical affinity is not a sufficient guide to investigate medecine — by a man's countenance we sometime may judge of his virtues or qualities, but we may be deceived — Isaac Newton's countenance shewed no wonderful intellectual marks — as with men so with plants — their external characters often deceive us with respect to their virtues — Species of the same genus frequently differ in their qualities — By the natural order of plants we mean the assemblage of plants different in appearance but all of the same genus — all grapes are innocent but one which is poisonous — The Mullen mixed with flour and made into pills, kills fish readily — The heedless practitioner might be much deceived in trusting to Botanical affinity alone — The Romans cultivated the Papaver Somniferum as an eatable article, for we do not know that they used it as a medecine — The seeds of poppy yield an excellent oil like oil of olives which is perfectly innocent — I am of opinion that Botanical affinity unaided by Chemical analysis will not be sufficient to fix the virtues of plants —

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bitter not acid - two beets are brought to our table the red and white beet - according to the doctrine of Linnaeus we should expect the red to be more acid than the white beet, but the reverse is true - he says the colour white indicates sweet - this is correct with respect to white currants. - he says the colour black indicates an ungrateful taste - this is true in many respects - the black currant is as harmless as the red but it is ungrateful -

November 17th 1809

I consider life the same in all animals and vegetables -

Linnaeus divides all medicines into nervine, muscular and visceral - this is very imperfect - Boerhaave supposed that the body was a system composed of subordinate systems - The animal frame is a chain composed of a number of links, each of which is mutually dependent on ~~each~~ the other - I believe that certain medicines affect particular parts in preference to all others - some medicines operate specifically, but this rule is limited - it would be well to banish the word specific, as applied to medicines - I would substitute the term idiopathetic, meaning that some medicines act on one part in preference to another, as sacch. saturni - Erasmus Darwin proposed a new division of Materia Medica under the following heads 1. Nutrientia - 2 Incitantia - 3 Secernentia - 4 Sorbentia 5 Invertentia - 6 Revertentia 7 Torpentia - I shall not follow his arrangement - Incitantia & Stimulantia are synonomous - Darwin's secernentia embrace very

different medecines - Opium has salivated and also produced a flow of Urine and perspiration - Darwins theory is not supported by a sufficient number of testimonies - some writers arrange the Materia Medica in alphabetical order - this is not correct - Cullens arrangement is better than Darwins - In treating of vegetables I will not follow the botanical arrangement - The plan of Cullen is tolerably good -

November 20th 1809

All have agreed in dividing the science of Materia Medica into two branches

1 Materia Alimentaria.

So much attention has been devoted to the first of these - I shall inquire into the virtues and properties of aliments - It has been said that lectures on this science should always begin with aliments - I shall consider their use in diseases - By aliments we mean those substances which when taken into the body, supply the solid and fluid matter of it - Cullen says, the matter of vegetables fitted to form the animal fluids, is an acid, sugar and oil - This is not entirely correct - I shall begin with acid - Cullen thinks an acid might be found in sugar - he thinks acid is necessary to our fluids - almost every species of vegetable aliment is capable of accescent fermentation - he says an acid is always present in the stomach - He says that without pure acid our fluids would soon putrefy - Scurvy is cured by accescent aliments vegetables are not necessary to life - whole nations ~~live~~ live on animal food - Dr Cullen thinks that fossil acids do not enter our fluids, because they pass unchanged thro' the excretions - I deny this because we take vitriolic acid diluted with safety

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November 16th 1809

Sensible qualities of Plants

By the sensible qualities of plants I mean their taste smell and colour; the ancient supposed all plants to be similar in virtues, whose external appearances were the same - plants of different species often have similar external marks - the ancients inferred the properties of plants from their taste and smell - parsley and sallad are alike in every respect -
This method has laid the foundation of a great part of our knowledge of medecine - it was practised by the Indians - their olfactories are more exquisite than those of civilized nations - deleterious plants become inoffensive to some persons by habit - Dr Cullen says that substances which neither affect the taste nor smell, should be rejected - but some of the most powerful medecines have no taste or smell - the venom of the viper which is poisonous is insipid and ~~inodorous~~ inodorous, says Fontana - I have repeated Fontanas experiments - I took from a healthy viper a quantity of venom - I put 6 drops on my tongue with confidence. I found it to produce a sensation on my tongue like that of Indian turnip or the Arum - this sensation extended to the fauces - I was alarmed and washed my mouth with ~~cold~~ warm water, 50 times, but the pungency still remained - We know that in certain seasons the vipers venom is inert, perhaps this was the cause of the different result of the experiments of Fontana - Whole systems of our science have been founded on the notion that the virtues of medecines might be known by their taste or smell - Mr Hullegas of this city diseased could tell on drinking a dish of tea

whether the sugar had been cut with a knife or had been broken otherwise -
sometimes the taste and smell indicate the exact virtues of plants - The different tastes of plants are not easily named and there are tastes that cannot be comprehended under any general head - the common tastes are acid, sweet, styptic &c - bodies which give out a strong odour were thought to act on the ~~brain~~ nervous system as musk
as a general rule this is fundamentally erroneous. Linnaeus is mistaken in saying that odoriferous plants act only on the nervous system and that vapid bodies act only on muscular fibres - there is more difficulty in reducing to order, odours than plants - both are fallacious tests in ascertaining the virtues of medicines - a division of odours is difficult to be made - The science of Materia Medica cannot be promoted by an attendance to the odours of substances - some odours, however powerful, have no effect on some persons - so is it with taste - great evils might arise from the practice of determining the virtues of plants from their odours and smell - Linnaeus was of opinion that the colour of plants could decide their qualities - Sallad when green has a strong taste and is diuretic - when ~~dry~~ blanched a white it is insipid and not diuretic - this is owing to its greater strength when green - Linnaeus says the colour yellow indicates a bitter taste - this is true in many cases as in turmeric, guaiac, gentian &c - the yellow plum is not bitter nor the yellow strawberry - he says that the colour red indicates an acid - as the cranberry - sumach - the red fruit of black alder is

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and benefit — Cullen says they irritate ulcers, but do not cure scurvy — this is not always true, for acids have cured scurvy — the alimentary quality of acids says Cullen is confined to vegetables — vegetable food is by no means necessary to animal life — there is no such thing as carnivorous or herbivorous animals, as Hunter says — The Lion which is said to be carnivorous eats vegetable matters — In Africa we find whole nations who eat no vegetable matter yet they are not affected with scurvy — The Inhabitants of England 300 years ago, lived on animal food (in certain part) yet they had no scurvy — that vegetable matters undergo the acetous fermentation is argued by many besides Cullen — but Hunter, Spallanzani &c prove that this is false, that all solution in the stomach is effected by the Gastric juice — chemists for a long time supposed there was no difference between vegetable matter in a dead and living state — a quantity of acid is often ejected in the act of vomiting. this when saturated with Potash forms the Sal diuretics — I doubt whether the acetous fermentation ever takes place in ~~vomiting~~ digestion — It is not fair to form notion of the fluids when out of the body from their state in it — Hodgee said that when acid existed in the stomach it depended on a disease of that viscus — Dr Bland found that flesh in saliva ~~with~~ was dissolved with fermentation — he never found litmus paper reddened by the contents of the stomach — nor did the latter effervesce with chalk — Spallanzani proved the same — Dr Wilson of Penna was opposed to fermentation in the stomach — I believe that solution in the stomach is independent of fermentation — there may be an acid, sometimes, in the stomach — other acids besides the vegetable have been found in the stomach — Dr Young says, that when an acid is sensible to the taste, in gastric juice, it is not vegetable, but one sui generis or purely Phosphoric — If digestion were a chemical process, it would

exhibit appearances similar to those in chemical phe-
-nomena - in healthy digestion, no foetid odour is ejected,
the breath is good - In a patient of mine in 1794 the
breath smelt strongly of Phosphoric Acid - this proceeded
no doubt, from the food being undissolved - the patient
had the Rickets, the bones almost dissolved - I believe
the phosphoric acid of bone comes from the bread & that
we eat - whatever be the substances digested, the same
effect takes place in a healthy stomach - a chymous
mass of a homogeneous nature is produced - Pro. Hunters
proof of the digestion of the stomach after death made
me think that this process might go on out of the
body as well as in it - I think the stomach is very
seldom if ever digested - as digestion in membranous
stomachs is ~~accomplished~~ accomplished by the Gastric
juice, it is necessarily accompanied with life - it cannot
take place after death - heat is no doubt necessary to
digestion, but less so than some have imagined, the gastric
juice of the pike is the strongest - I do not pretend to
give a complete view of the digestive process - I
cannot think the bile is an excrementitious fluid - the
bile is often naturally poured into the stomach to mix
with the chyme in a great number of animals even
when the pancreatic juice is not

November 21st 1809

I do not say that Gastric juice forms perfect chyle -
this is not completely effected in the stomach - digestion
is not finished until chyle is formed - it appears that
the alimentary matters taken into the stomach are
not formed into perfect chyle until they have passed
into the intestines and have been mixed with the bile
and pancreatic juice - is chyle completely formed in
those animals into whose stomachs bile is mixed -

* It is not doubtful if any fact can be established by experience than the nutricious property of Sugar fully established — If this doubtful, it's doubtful whether D. B. has a leg on his shoulders —

-diately thrown - chyle is not perfectly formed in the stomach but in the small intestines - I do not say there are no chylous vessels which take up chyle in the stomach, but these are few in number - in some fishes, digestion is partly accomplished in the oesophagus as Spallanzani says - in man the oesophagus is not entitled to the name of a digestive organ except the lower part of it - but perhaps the dissolved aliment continues to be more perfectly animalised throughout the whole lacteal system - Hodgs Mag. Dig -
Perhaps acid is alimentary -

Of Sugar

It is doubtful* whether sugar is alimentary, but in a saline state as in the sugar cane it may be nutritious - In treating of sugar as an aliment I shall first show its nutritious properties - the people of warm climates live on fruits which contain much saccharine matter as the date &c - the fig which contains much sugar is very nutritious - its nutritious properties depend partly on its mucilage - the Indians are acquainted with the nutritious property of honey - they mix it with Indian meal - half pound of dried beets yield ℥ii of saccharine matter - its nutritious properties are owing to its sugar - sugar is contained in most farinaceous seeds - vegetables contain much saccharine matter as is proven by their tendency to run into the vinous fermentation - wheat and barley seeds contain much sugar - pease, beans and leguminous seeds contain sugar - young pease are more nutritious than old ones - Professor Murray of Gettingen believes the slaves of West Indies get fat on sugar canes -

I think sugar in its pure state is the most nutritious of all substances — Boerhaave said that excess of sugar emaciates the body — Dr Franklin's Grandfather made it a practice to eat as much sugar on his bread as he could and he also ate it in all his victuals — he lived to be 99 years old — sugar contains no worse substances than milk or honey — I am convinced that sugar induces plethora — Jno. Hunter prescribed sugar as a restorative in emaciated patients — sugar is extremely nutritious to other animals besides man — but not so to all animals — sugar is an anthelmintic to some worms — among quadrupeds, sugar is nutritious to horses & cows — In England, cattle are raised on sugar and saccharine matters — sugar is one of the most nutritious articles and keeps a long time without spoiling — sugar is antiseptic — venison prepared in sugar resists putrefaction whole summer — mutton keeps sweet in summer when kept in sugar — dead bodies have been preserved in honey ~~which~~ without spoiling — sugar is good in scurvy — scorbutic gums are often cured by sugar and water — Dr Cullen thinks the scarcity of Epidemics is owing to the great use of sugar — in West Indies sugar is greatly used but pestilential fevers are common there — Bingle fancied he saw putrefaction in many cases where we know it could not have existed — In this country we are too well acquainted with malignant fevers to believe it possible to cure them with sugar — I have known persons who lived on saccharine diet, who fell early victims to our yellow fever — A vegetable diet is inefficacious in curing Lepra — this diet or a diet of sugar will not cure this disease — lepra is not ~~as~~ common where sugar is much used nor more prevalent where animal diet is used —

+ what are they –

Lepra and syphilis are modifications of the same disease - this is proven by facts - The saccharine principle is common to vegetables - it is said that sugar is not found in mushrooms and fungous roots - some suppose these to be animal matters - Humboldt extracted sugar from fungous roots - Bees obtain honey from some fungous plants - the reason why they have not much sugar is because they mostly grow where light does not reach them - Hodgee says there is no sugar in the Lichens - sugar has been produced from grapes, shrubs &c - The people of Java obtain sugar from various plants - some obtain it from Cocoa - no plant except the maple tree affords more sugar than the sugar cane - it has been obtained from hickory - sugar is contained in animal substances - milk and perhaps sugar exists in blood in a healthy state - I am not certain of this - blood has not a saccharine taste - barley has not a sweet taste; though it contains sugar - sugar has been extracted from the urine of patients in diabetes - 20 ℥ of sugar were procured from the urine discharged by a diabetic patient in one day - sugar is certainly diuretic in some persons - honey is diuretic - the exhibition of sugar in diabetes is improper - sugar is said to have produced Diabetes - It has been thought that the sweetness of the urine in diabetes depended on the diseased state of the kidneys - Dr Pemberton thinks the sweetness depends on some process performed in the intestines and stomach - sugar in diabetes is perhaps owing to the morbid state of the heart, as palpitations, irregular pulse &c - this sweetness exists in the blood in diabetic patients - the symptoms attending diabetic patients is palpitation - violent headache &c -

Nov. 23d 1809

Animal sugar contains less azote, carbon &c than common sugar - according to experiments sugar is an acide - consisting of carbone, oxygen and hydrogen - 64 parts of oxygen, 24 carbone, 12 hydrogen - The sweetness of sugar is owing to its oxygen - when calcined it leaves ashes, composed of lime or calcareous matter if treated with Nitric acid - maple sugar is less soluble than common sugar in hot water - sugar in vegetables and animals is abundant - it is said to exist in the mineral kingdom, as in the barilla - How far is a diet of sugar productive of Dyspepsia? sugar may be used to a great extent without being injurious - children consume a great deal - in some arthritic patients sugar is injurious, if dyspepsia exist - saccharine jellies have relieved calculous affections - the fig is good in Calculus - the vulgar opinion respecting sugar is unfounded - it decreases worms - I have allowed in cases of worms sugar and molasses twice a day - the vulgar say that sugar injures the teeth - where the teeth are bad it may injure them - ~~it does~~ the teeth are whiter by using it - when they are sound, sugar will not hurt them - the scotch have white teeth, though they eat much sugar - crystals of tartar act on the ~~to~~ enamel of the teeth -

Honey is a vegetable substance - there is a great deal of honey which is animal, deposited on the leaves of trees by insects - this is secreted from their rectum and carried away by the bees - honey is less analagous to sugar than has been supposed - Cullen says sugar and honey are alike in their properties -

they do not resemble each other but differ in the degree of nutriment - sugar contains most - the laxative qualities of honey make it less nutritious - The analysis of honey shows it to contain sugar, carbon, oxygen, hydrogen - honey possesses medical properties different from sugar - honey has been recommended in all ages in cough - its good virtues depend on matters which are often combined with it - it sometimes contains an anodyne quality - honey has been recommended in asthma - it is sometimes efficacious - Honey like sugar is employed in gravelly complaints; of this I could adduce many instances - it is more powerful than sugar as an antilithic - I have asserted that honey dew as it is called, is animal - it is found in Virginia and other parts -

Oil - I have no hesitation in pronouncing this a nutritious substance - oily vegetable seeds are said by many not to be nutritious - the nutritious quality of pease, beans, nuts &c is well established - in Britain they are cultivated and constitute the chief diet - a pound of pease or beans is more nutritious than a pound of bread - oil is always present in animals - I believe that oil constitutes a great part of the fluids of man - Oil whether animal or vegetable forms a part of the diet of all nations in the world; this oil is diffused in the chyle and absorbed by the lacteals - oil mixes with the chyle - I have seen chyle in the blood vessels but never have I seen fat there - the oil is secreted by the blood vessels - some have said it is found on the surface of extravasated lymph - this I have never seen - oil is laid up in adipose membrane

and is removed thence by absorption - it is absorbed in scurvy, venereal disease &c - oil is absorbed into the mass of blood - Animals which retire to dens in winter are nourished by the absorption of the oily matter in the adipose membrane - all do not believe this fact - Hallen denied it - he says that such animals discharge no fæces, do not perspire - if they passed no feeces we might say they required no nourishment - frogs and lizards discharge no fæces - the lymphatics absorb for a long time after an animal is dead - I have spoken of the interrupted life of hibernating animals - I will now describe their soporose state - this is not interrupted life - the pulse is slow - these animals are often roused by the application of stimuli - some of them take stimulating matters into their quarters - they eat these at intervals - that fat is actually absorbed by hibernating animals is certain, when they come out of their caverns, they are very weak and lean - on opening them no fat is to be seen - to this power of the lymphatic vessels we must ascribe the removal of fluids in hibernating animals - when horses are ill treated in summer or run down as it is called they die suddenly - a large quantity of fat has been found floating in their blood vessels - Naturalists have supposed that insects without red blood are preserved by the absorption of their fat - all insects like these passing their time under ground are preserved by the absorption of fat laid up in the adipose membrane - fat is sometimes absorbed by the lymphatics in the human body in emaciated persons - fat has been seen in the lymphatic vessels

November 24th 1809

Butter is nutritious - one pound of bread with ½ of butter gives more nourishment than thrice of bread without butter - ~~one of the~~ I have not forbidden it to patients in Phthisis pulmonalis - the excessive use of fatty matter may be injurious by inducing plethora - in fevers oily matters are injurious except in such large doses as to prove Cathartic - olive oil is much used in the Barbary States - rancid oil is highly stimulating - I conclude this subject by saying that the fatty matter of ducks and geese is known to be wholesome - I have now considered acid, sugar and oil - Man is the most omnivorous of all animals - his system accomodates itself to a change of food better than any other animal - mucilaginous matters are nutritious - Hadyee says mucilage and gum are most nutritious - almost all vegetables destitute of colour are insipid - they have been called Gums - the Gum Tragacanth has some properties of farinaceous matters - the mucilage of Gum Arabic is extremely nutritious - the africans almost live on it and water - 1000 people lived 2 months on Gum Arabic - it often supports the system in Phthisis Pulmonalis - Dr Cullen admits Gum Arabic to be alimentary - he considers it to be a simple substance - in powder, it resembles meal - it is like salep - gum differs somewhat from farina in its properties - Gum contains oxygen, hydrogen, carbon and azote - contains more oxygen & less hydrogen than sugar - Fourcroy says, sugar contains a little Phosphoric acid - all substances which nourish the system are compounds - Probably the nutritious quality of substances depends on their oxygen -

The assemblage of matters employed in aliment is an extensive source of nourishment to man - D Young, Diss.
Gums may differ from mucilage in their properties - it is said that all plants yielding gum have astringent bark viz. sour wild cherry - there is little astringency in the barks of plants which afford mucilage - there are exceptions to this rule - wheat and rye in the wild state are astringent - the reverse of this takes place when they are cultivated - this changes the gallic acid or destroys it - The solution of gum is transparent (says a writer) that of mucilage is opake - water in the state in which we receive it is impure - it is nutritious - many persons have lived on it for weeks - Haller speaks of it - fishes afford proofs of the nutritious nature of water - a rattle snake in my possession has lived 23 months on water alone - vegetables are sometimes nourished with nothing but water - I think Carbon is nutritious to the system - it is the best aliment for vegetables in a moderate quantity - carbon is nutritive to poultry - to the hog it affords nourishment, as in the case of corn - carbon enters largely into the composition of sugar - gums contain more carbon than sugar - seeing that carbon enters into two of the most nutritive substances, we may consider it as being extremely nutritious - calcareous earth is fitted to form animal fluid and to nourish the system - Fodyce says it yields the body no nourishment - The calcareous earth & the Phos. Lime constitute a great part of our solids - Calcareous earth and the Phos. Lime is obtained from our aliments - they exist in the blood, chyle, semen &c - Phos Calcis has been detected in the semen by Chemists - calcareous earth is an ~~indefinite~~ original substance, independent

on the deposition of animal & vegetable matter — Calcareous earth is the chief nutriment of many fishes — birds of different kinds swallow bones by which they are nourished — stones are necessary to the digestion of food in many birds — Dr Thompson says Calcareous earth is necessary to the formation of the shell of the egg — I am not certain of this in all cases — the facility of the digestion of calcareous earth and its ready passage in the course of the fluids proves its nutritious quality — In our country many Indians make bread of the bones of fishes — Humboldt says it is nutritious — Light is nutritious and assists in supporting the system — it promotes the growth of vegetables — Light is not absolutely necessary to animal life — without light the functions of digestion, respiration &c go on, but not as well as with light — miners live in darkness — The complexions of the Nuns in Germany & Mexico are extremely Cadaverous — they are subject to cancers of the breasts — perhaps all this is not owing to the want of light — While the seed remains in the earth, light is not necessary — heat is necessary to its germination — when the plant germinates and meets the light, it cannot exist without its agency — they further in darkness — the solar light influences vegetables — it affects their colour —

November 27th 1809

Sap moves in vegetables by an irritable principle inherent in their vessels — Farmers have supposed that lime is useful in agriculture only by attracting moisture — thus calcareous earth is of great service to vegetables — Lime increases the quantity & quality of crops —

It has been supposed that the calcareous earth and iron in vegetables were formed by their own vessels. the plants which grow in pure a argillaceous water will yield the same result - plants do absorb calcareous earth - arsenic, lead &c as proved by experiment - Saussure analysed plants taken from argillaceous and granite soils - the former contained more lime and the wood was much stronger than in the latter - oaks and elms should be cut from calcareous tracts when wanted for naval purposes -
Silex is not nutritious to vegetables - Calcareous earth is alimentary to animals and vegetables - light promotes the function of absorption in plants - Fungous plants are little influenced by the solar light - light affects the taste of plants - hemlock in the light is 10 times as strong as when cultivated in mines - Dr Drake of England found that the cause of the failure of Digitalis was owing to its being planted in a situation without light -

Worms when kept from the light are white - Negro children when first born are not black - the blackness of negroes is hastened by exposure to the light -

Nov 28th 1809

Materia Medica - This is the most difficult part of my task, not on account of the number of articles but the difficulty of arranging them

Astringents - I shall not trouble you with a class of this kind, tho' Dr Cullen has used them - there is good reason for retaining the name in some cases -

* theatre a la bourgeoisie.

If I were to abolish the term astringent, I might call them tonics - there is nothing in which a philosopher requires more caution than in changing the arrangement of matter and in making new names. astringents will be laid aside, Tonics never will - Astringents I propose to divide in a future season into 1 Such as are purely astringent 2 - Such as are bitter ~~and astringent~~ 3 Such as are marked with bitterness and astringency - Dr Cullen says astringents are such substances as cause a contraction in the solids and produce in them a condensation - Their use says he appears in tanning also in their antiseptic qualities - We perceive from Cullen that astringents act chemically on the animal machine in the same way as they do on dead matter - the infusion of bark employed in tanning contains tan or tannin and a peculiar extract, produced also from galls - it is a brittle substance soluble in water - the solution is very bitter and astringent - more soluble in alcohol - this substance is more soluble than the extract - the hide extracts it when put into the infusion - both these substances enter the composition of the hide - the tannin gives the hide its firmness - its weight is augmented - they absorb about one third of the matter into which they are put - 2 or 3 years are requisite for tanning hides - upon the human body the operation of astringents is very different - when an astringent liquor is applied to the body it is diffused and only partly absorbed - I admit the fact that different fluids when applied to the surface of the body are absorbed but in small quantity - very little tannin can be absorbed -

the bitter and colouring principle of bile are very distinct from each other – human bodies were preserved in moss for a century without becoming putrid – this proves the antiseptic quality of moss – the skins of these bodies did not present the least appearance of being tanned though they were in astringent matter so long – astringents do not at all appear to act on the skin of living animals – a salamander was kept for a long time in an astringent liquor without being affected – in incipient gangrene some astringents are very useful – bark prevents it only by operating on the adjacent living matter – it does not operate here as an antiseptic – I do not admit of a class of antiseptics – Jas. Moore, surgeon, in London made experiments to prove bark had no astringent effect on living animals – I put my hand into a strong astringent liquor – a large quantity of perspirable matter was discharged – oak bark could not diminish the diameter of the perspirable vessels – When we apply alum to the tip of the tongue, a corrugation over the whole mouth takes place – Dr Darwin says the diminution of the quantity of saliva is not owing to coagulation, but to absorption of the thin part of the saliva – on this theory Darwin has founded his, Sorbentia; the astringent matter has a stimulating power on the absorbents, by which they take up the thin parts of the saliva – I am of opinion that corrugation takes place rather than absorption of the saliva in some cases – an astringent matter was given to an animal by which the pylorus was closed entirely – astringents exert a similar effect on vegetables – they have sensibility, I believe, also irritability – take a piece of sponge and with a lancet cut a branch longitudinally – it will almost bleed itself to death of itself alone – the hemorrhage can be readily stopt by burnt alum – Heberden says astringents are of no use except in hemorrhages of the primæ viæ – his experiments differ from mine – the effect produced is owing to the operation on the stomach – The pharyngism of fever has been

prevented by a dose of bark – hemorrhage has been stopt by gr. i of sugar of lead

November 30th 1809 Thursday –

The matter of astringent is said ~~is said~~ to consist of a certain acid and earth – a combination of acid & earth will not always be astringent – with respect to vegetable astringents, Cullen says acid is not evident – To the chemist we owe our correct notions of the astringent principle – it appears to be saline – the leaves of trees, roots, &c abound with an acid called by some Gallic acid – some species of sumac abound more with this acid than any other vegetable – this acid is soluble in 1/2 its quantity of water – it is soluble in Ink – when digested with Nitric acid it is changed into the acid of Sugar – potash, soda and ammonia unite with gallic acid and form gallates – cultivation deprives many plants of this acid – the potatoe, in a wild state is better – Dr Woodhouse thought the astringent principle to be a gallate of alumine – Dr Walker has proven that the astringent principle is either gallate of magnesia, alumine &c – he says the base of gallic acid is not an individual one, Woodhouse says it is – I think Gallic acid is imperfectly understood – the means of detecting gallic acid – we discover the astringent quality by its peculiar taste – astringents induce a sense of constriction wherever it goes – its presence may be detected by an application of sulph. Ferri – a black or blue colour is produced – Dr Woodhouse said the black colour ~~of~~ was not struck by mixing Copperas with Gallic acid – The test just mentioned is important in a chemical point of view – it is of less importance in Medicine – sage strikes a black colour with copperas – I conclude these remarks by speaking of the Pharmaceutical treatment of astringents – vegetable astringents are more powerful when taken in substance – their powers are extracted by the Gastric juice more than by any other solvent –

resinous matter does not dissolve in the stomach, a little gum should always be added – the resin of opium is insoluble in the stomach – and when taken in large quantity is not injurious. with the gum it is very powerful – resin without gum is inert – the stomach will sometimes receive astringents in a liquid form, but will reject them when in powder – astringents give out their qualities to water and spt. vini – they may be treated by infusion or decoction – simple matters are most easily extracted by infusion. I never give decoction for when prepared in open vessels it is inert – I pour boiling water on the powder of bark – stirr it, but not let it boil; then decant off the liquor – the astringent principle is soluble in Ether –

astringents are used in intermittent fevers – they have been recommended in cases of debility – lacteria &c – Dr Cullen says they are good in the beginning of Dropsy, but they very often do harm – Dropsy always assumes the form of a remittent or intermittent – here astringents are useful – I discovered this in 1796 – In Dropsy with febrile action, tonics are necessary in the intervals – a Hydrocele* brought on by Gout was cured by applying a sinapism to the feet – pain always attends Hydrocele from arthritis –

* what Must be done with Astringents?

Hemorrhages

December 1st 1804 - Friday

In the treatment of Hemorrhages, astringents are the best remedies in some cases - as in the uterus, intestines — The astringent medecines are most indispensably necessary - I shall soon speak of lead as an astringent - perhaps the benefit derived from astringents is owing to a principle not astringent - Ipecacuanha has been useful in some hemorrhages - this medecine though astringent, is not much so - Astringents have been successful in some Diarrhœas and Dysenteries - I do not think that these diseases arise from the same remote causes - astringents have been recommended in Dysentery - but they are injurious - Dr. Cullen supposed that dysentery depended on a constriction of the alimentary canal - there are some astringents which do purge -

The immediate cause of dysentery is inflammatory action of the heart and arteries - some astringents are of use, which cannot reduce inflammation - some physicians use bark in recent Dysenteries and rely on it - I shall hereafter examine this subject - Bark is well adapted in dysenteries in which it purges - Astringents have been recommended in Diarrhœa - I think them well adapted to this disease when it depends on a languid state of the Intestines -

Diarrhœa sometime depends on febrile action — it often depends on contagion and other stimuli — gout leaving the feet, often attacks the intestine producing Diarrhœa — in such cases astringents do harm — when the disease is the effect of febrile action, a slight salivation is useful — low diet — in diarrhœa from febrile action, astringents produce bad effects — such cases I have had under my care — In these cases I do not think, bleeding from the arm good — use leeches, blisters &c — In arthritic diarrhœa or diarrhœa depending on gout, astringents do harm always (except in old age) — they are never necessary to subdue it — use bleeding, low diet — blisters to the feet and ancles — this brings the gout to its old situation — In arthritic diarrhœa of old persons we have to use astringents —

Fluor Albus, Leucorrhea, or Whites — the most striking characteristics of this disease are the discharges from the uterus — these are of a serous nature — like the white of an egg — but it sometimes yellow like sulphur — astringents have been used in this disease — Physicians frequently fail of curing it — I think the astringent plan has been often successful — I have succeeded with astringents — I am aware of the distinction necessary to be drawn

between the different stages of this Disease —
Sometimes the discharge is owing to febrile action and increased by the increase of the latter — One species has been called Fluor Albus calidus, in this, astringents are hurtful — another is called Fluor albus frigidus — here astringents are good — this distinction was first drawn by Dr. Darwin — we should always keep it in view — by it we are enabled to explain the cause of our failure or success in the disease —
In chronic Fluor albus, astringents are good — I have mentioned fever as one cause of Leucorrhœa in this species I have succeeded in curing the patient by the application of blisters to the lumbar region — the cure is thus often effected in 48 hours — here astringents would have been useless and injurious — In Gonorrhœa, astringents are sometimes good — when accompanied with fever, they do harm — when the disease is of a chronic nature, astringents are best — It is very difficult to distinguish Gonorrhœa from Leucorrhœa in Females — I have seen cases where men have contracted Leucorrhœa from their wives —

Diabetes — In this disease astringents sometimes do harm — in this disease the kidneys are often enlarged — violent fever is sometimes the cause

& he supposes them to act by absorbing acid in the stomach – this is not correct –

of Diabetes — In diabetes from biliary fever Emetics relieve the patient, when astringents would never cure — I have used Vitr. and Tart. Emetic - in conjunction with small bleedings successfully — astringents are useful in Diabetes unaccompanied with Fever —

Lyposis — in this disease, astringents have been found useful — I have used Kino with advantage — In colliquative sweatings, astringents have been found useful - in the sweating stage of phthisis pulmonalis also ——

The efficacy of astringents in relieving the pains of calculi, is great — I shall speak of it in another place — Uva Ursi in calculus has produced happy effects —

& D. Cullen's doctrine of the modus operandi of astringents in calculi* — his theory is very unsatisfactory - I shall speak of this when on the subject of Uva Ursi — Many astringents relieve the pains of calculi — I do not say that astringents exert a specific effect on calculi — I have known calculi to be expelled by the use of vegetable astringents ——

Mr. Sanford, who died lately — used Uva Ursi in powder for Nephritis — he used it also in

* If this is not true, offer a better one, before you deny this.

in tea — while he used it, a number of small stones were excreted — when he left it off; no stone came away — I know not how astringents operate in the expulsion of calculi; but such is the fact —

Barton — December 4th 1809 Monday

I proceed in order to speak of particular astringent — I intend to mention some of Dr Cullen's mineral astringent — I shall treat of them under the head tonics — I shall speak of vegetable astringents — Nature has been very ~~liberable~~ liberal in distributing the astringent principle — the quality of all the barks is generally astringent — it abounds in plants which are greatly mucilaginous — I confess myself at a loss how to speak of vegetable astringents — Dr Cullen treats of them in their natural order — I cannot follow Dr Cullen in this respect — We should begin with the stronger and descend to the weaker or begin with the weaker and ascend to the stronger — Cullen goes according to Botanical affinity — therefore the weak medecines are combined with the stronger — the barks of some species of oak are very astringent — their use is known in tanning — decoctions of bark are employed in tumefactions of the fauces; to this decoction alum is sometimes joined — Dr Cullen used the English bark in powder he gave ℥ij in the interval of the paroxysms of an intermittent — acorns have been used as astringents —

+ a funny word —

In cases of gangrene I have used decoction of bark (the common oak) which answered as well as Peruv cort. — I have also used it in form of poultice — * The spanish oak comes nearest to the English in its good qualities — The oak used in dyeing is not as good a medecine as the others — Chesnut oak bark has been used in fevers and has been found little inferior to Peruv. cort. —

In Brunswick, Germany, the powder of acorns has been used in Erysiplas — it may produce some good effect, provided it excite perspiration — White oak is nearest to the English oak in its effect of all the oaks we have * Compare this with the above —

= Of. Galls —

There are peculiar excresences of oaks — I think it necessary to give you its natural history — every gall is actually the domicile of a particular insect — the gall is produced by a short fly worm of a transparent colour — it has four wings — In July it punctures the leaf of the oak

Either water or spirits of wine takes up the ex-
-tract of galls — this extract is one of the most pow-
-erful astringents we know of — it has been recom-
-mended in many diseases — it was formerly
used in Febris Intermittens — they were preferred to
the Bark, because they operated in a less quantity —
They were said not to increase the heat of the system —
and were much cheaper than the Cortex Peruv —
some have supposed they would lay the foundation
of obstructions of the viscera — I do not believe this
notion — Galls have been recommended in
the cure of diseases, among which is Flatus —
in this disease they have been used by giving Pulv.
Gallæ ℥ss Aqua dist ℥vj ℏ — this, we are told,
does not accasion costiveness, but it sometimes purges —
Decoction of Galls have been found useful in
affections of the loins — In Scotland they use the
pulv-gallæ with adeps. suillæ, in cases of Piles or
Hemorhoids — I have used equal parts of the
ingredients with great success in this disease — but
I think it is necessary to mention for your in-
-formation, the different species of Piles — one
species depends on a relaxed state of the system —
this belongs to the decline of life — here the Pulv. Gallæ

To the mixture I add 2 spoonfuls brandy

is ~~injurious~~ beneficial and often successful — but when the disease depends on febrile action, Galls do harm — this is an important direction — the disease of recent piles does not require the use of astringents — here bleeding, purging &c is necessary —

The Hemorrhoids accompany Malignant Fevers I saw 30 persons afflicted with this disease in connection with Febris Malgna, who had not been afflicted with piles before — here very little advantage would be derived from astringents — Dr Schweiner recommends Galls in venereal complaints — in debility of the Urethra, decoction of Galls are found useful — of this I shall speak more fully hereafter — you will find Galls useful in some diarrhœas — I have used them in this disease in the Penna Hospital — the formula is as follows — a pint of water is poured on ℥ss of Pulv Galla — this to be stirred and strained — the patient is to take a table spoonful 3 or 10 times a day — he must also take Laudanum — A Physician in England applied Pulv Gallæ to muscles without producing any effect — when he denudate it, life was destroyed —

Dr. Bicker used in Leucorrhœa

℞ Pulv. q. Kino ℥j
c q. Calcis — pulit i
Mft. Injectio —

Kino in Febris Intermit —

℞ Pulv. Kino grs XLviii —
— opii — grs. ij —
— Columbo
— or Gentian grs LXij — M. ft Pulveres ℔ — q

2 grs of the powder of galls when taken into the stomach, have very bad effects — Galls in wine have been used successfully in diarrhoea —

Of Kino

This Gum improperly so called, is an important astringent — we are not perfectly acquainted with its Botanical History — one specie grows at Georgia — the greatest part of it is brought from the West Indies — the effect of Kino and its chemical qualities show it to be very astringent — it is perfectly soluble in the mouth — water and spt vini dissolve it — its colour is given out to these menstrua — The Tinct Kino strikes a black colour with Solutio Sulphas Ferri — it is very different from Sang. Draconis — the dose for an adult is ℥i in 24 hours — 4 grs for a child — Kino has been recommended in different diseases — Dr Fothergill has used it with success in Febris Intermittens — sometimes bark succeeds after Kino has failed — the Dr used ℥ij Kino in ℔ij spt. vini digested for a few days — I used it in intermittent for the first time in 1804 — I have combined it with Pulv. Gentian and Columbo — Kino 48 grs opium grs ij — Columbo 62 grs — divided into 4 doses —

Kino in Gonorrhoea –
℞ Pulv. Kino ʒij Mucil. G. arabici ℥j – Pulv. Opii drij – aquæ ℥x
~~M~~ ft. Injectio –

Tincture of Kino
℞. Gumm. Kino ℥iij
Spt. Vini ℔ pints –
macerate for 14 days and strain –

Kino in Pyrosis
℞ Pulv. Kino grs x Pulv. Opii gr ½ Muc. G. arabici q.s. to make
pills ij –

Dr Cullen speaks well of Kino — In cases of Fluor albus it has been used with advantage — the Edinburgh College have joined it with alum — I never tried it in Fluor albus — Some have used it in this disease, dissolved in Aqua Calcis — injection a similar prescription has been used in the Penn.a Hospital — Kino has been used with success in cases of Gonorrhœa — Kino ℈ij Mucil. G. Arab. ℥j Aqua ℥x — Opii ℈j — used as an injection — Bell — I have used Kino in this way — and also without Gum. Arabic — sometimes I combine Kino with Sulph. Zinc — one objection to Kino as an injection is that it colours the linen and the disease of the patient is thereby discovered — In Diabetes, Kino has been used successfully — Its success in many diseases makes me believe it might be good in Diabetes. In Pyrosis, Kino is recommended by Dr Pemberton — Kino pr. x. Opii gr. pr. Mucil G. Arab to make 2 pills — I have thus succeeded —

Terra Japonica is more astringent and brittle than Kino —

Tincture of Catechu

℞ Catechu ℥ij Cinnam. ℥ij
Spt. Vini quart i — macerate —

December 5th 1809 Tuesday

I come next to speak of Terra Japonica, This has been improperly called an earth, it is a juice – Succus Japonicus, a specie of Mimosa – this is of a dark red colour – has a bitterish, astringent taste – composed of gum in a great measure – the chief part of it is soluble in water – the residuum is taken up by Spt. vini – it is seldom employed in the practice of our country – It is used in Europe as an astringent in diarrhoea, dyssenteries, Fluor albus, profuse menses, &c – I have not used our medecine in these diseases – It is used as an ointment in combination with other astringent medecine, – this ointment is said to be good in ulcers – old writers have recommended astringents in wounds – these medecines they called Vulnerairs – there are cases where astringents are entitled to the name of vulnerairs – Bark is good in old, stubborn ulcers, in old buboes – it operates by stimulating the parts into action, by which good pus is produced; in many wounds to which astringents are applied with advantage, the substance is as it were dead matter – they act by stimulating the parts – The Terra Japonica is mentioned in the Dispensatory –

Botany Bay Yellow Resin has been lately used —

Logwood is used in Diarrhoea – it is a good medicine —

Uva Ursi — This is the arbutus uva ursi of Linnæus
The English call it Bear berry — it is found in New-
York, New-Jersey & it is an ever green herb and
a trailing plant — it grows within 15 miles of this
city — some physicians are mere blanks!!!!
The uva ursi is properly arranged with astringents
this medecine produces styptticity on the tongue —
increases the saliva — here they approach the
Kino — more bitterness exists in the leaves of the
Uva Ursi than in the barks — The Pp of Uva Ursi
strikes a black colour with Sulph. Ferri — the
leaves contain a greater quantity of gum than
resin — therefore it is extracted best by water —
it produces no great effect on the pulse — we should
think it merits attention — it is certainly a stim-
ulant in a certain degree — it may be found
useful in most cases in which astringents have
generally good effects — it is good in Intermittents —
In the Intermittents of delicate people, it has been
used with success — I should expect advantage
from Uva Ursi in doses of 8 or 10 gr in powder 3
times a day in cases of Dyspepsia — I know it
is good in increasing the power of the stomach —
it has been used with success in Fluor albus —

Murray speaks of the Uva Ursi from its good effects in old gonorrhœa — I think if persisted in it will be found good in Fluor albus — I have used it in Gonorrhœa of very long standing — the patient used the decoction and chewed the leaves — I recommend it to you in Gonorrhœa — where injection cannot be used on account of irritability — Benjn Bell speaks of uva ursi as the most effectual in gonorrhœa — no advantage is derived from this medecine when the prostate gland is affected — ℞ to ℥j is to be dose 3 or 4 times in die — This medecine has been employed by Physicians in Pennsylvania with great advantage — it is not adapted to recent states of gonorrhœa — I think decoction of Uva Ursi might be used with advantage in affections of the urethra and bladder — it may be injected with safety — it may be used internally in doses of ℥ss three or 4 times a day — ℥ij may be taken, but nausea is produced — of late this medecine has been used as a remedy in Phthisis Pulmonalis — I do not think it can be good in this disease except in the sweating stage — Some of the most important properties of this article remain to be mentioned — I mean its effects in

Due for the Use
£1 to £1 pounded

Nephritis, Calculus &c – there is no point on which I have made up my mind more than that this medecine is a powerful Antilithic – one good effect of it is to relieve strangury from Cantharides – this was first mentioned by my pupil Dr Ellitchell – he used uva ursi in decoction a while after the application of blisters and no strangury followed – other remedies are found for strangury from blisters – the decoction of uva ursi is to be given at the time the Cantharides is applied and no strangury follows –

Mistletoe

I have never used this medecine – the mistletoe is never found on the earth – it is attached to trees – as apple, oak &c – it is never found on dead trees – the mistletoe is exactly the same in its properties from whatever tree it be taken – it is formed by the living principle of the plant – I have shown you that plants do absorb – the mistletoe is a powerful astringent – its virtues reside chiefly in the bark – it is best employed in substance according to Muller and I think he is correct – the mistletoe possesses ~~the~~ bitterness – hence perhaps it would be better classed with tonics – it is recommended by Calbach in

convulsions, chorea sancti viti – he says it often fail – this medecine is certainly good in some cases of Epilepsy – Dr Hume employed it with success in one case of Epilepsy – I have heard it employed in this disease with advantage, but I have never tried it

December 4th 1809 Thursday

I will mention some of the indigenous plants of our country – the first I shall name is a valuable species of Geranium the

Geranium Maculatum – the root of this is very astringent – it has been used with benefit in Cholera Infantum – it was used in this disease, by Dr Hand of Lancaster, boiled in milk & drank very freely – I have followed this practice – I think astringents, in this disease, have been too much neglected – I say nothing of the styptic virtues of this plant, for myself – it has been useful in external and internal hemorrhages –

Heuchera americana, american vanicle or alum root – is most intensely astringent – it promises to be useful in practice – it has

Orobanche Virginiana

acquired some celebrity for its good effects in Cancers — I do not think it has done much in genuine cancers — it has probably been of service in ulcers, &c, which were taken for cancer — The Virginia broom rape, indigenous to our country, has acquired some celebrity as a medicine — it has been called cancer root — it is common in Ohio — ~~It~~ it grows under the beech tree, and is never found under any other tree — its sensible qualities are considerable — it has no leaves — it has a very astringent, and a taste that is nauseously bitter — Dr. Rush made it probable some time ago, that the famous cancer powder of the late Dr. Martin contained arsenic, and some astringent vegetable — Martin told me it did contain a vegetable which, he said grew in Pittsburgh — this plant grows here and it is probable this was the very one which entered his powder — I wish you to attend to this plant — in old ulcers, supposed to be cancerous, some astringents have been found useful — Dr. Benson of Germantown, on the authority of another used an astringent medicine, with arsenic, in cancer with success —

The Tormentilla Erecta not a native of this country - this has considerable resemblance to Cinque-foil - it deserves to be ranked high in the vegetable medecine - it has been used as a substitute for Cinch. cort. it has been combined with Gentian and then used in Intermittents - it has been recommended in cases of Abortion - This disease seems to depend on a relaxation of the system and particularly of the Uterus - here astringents are good and the tormentil may be used with Success -

Cortex Granatorum is a good astringent - my experience of its virtues are very small - for further information on this vegetable, I refer you to books on Mat. Med. - Of Acid Plants or Fruits - The Persimmon

European Sloe and some American species - I am now to speak of an article entitled to your attention as a medecine and as colouring matter - I mean - Rubia Tinctorum or Madder - this is a memorable plant in the history of Physiology - I do not think much of it as an astringent, but as an Emmenagogue, it is very important -

Madder tinges the bones of man and all animals except the amphibious, of a red colour — this is durable — if we discontinue the use of madder for a long time, the colour in the bones will disappear, probably owing to absorption — this taking up of the colouring matter is considered as a subject of Chemical affinity — in a state of solution of the blood, there is a deposition of Phosphas. Calcis in the serum — this acts as a mordant — the mordant combines with the colouring matter of the madder, and forms a beautiful pigment — if to a solution of madder be added Muri. Calcis — no change is produced — but add to this Phos. Soda and no effect will be evident — this is owing to the Muriatic acid having a greater affinity for Soda than for the lime, it quits the lime and unites with the soda, forming Muri. Soda — while the Phosphoric acid of the Phos Soda uniting with the lime forms the Phos. Calcis which is a good mordant for the dye of the madder and unites with it, forming a pigment — in old animals the Phos. Calcis exists in the bones not in the serum — therefore madder produces no change of colour — the bones of a foetus in utero have been coloured with Madder —

Super Sulph. Alumen. et Potas.

as the structure and composition of the enamel of the teeth, is different from that of the bones, this may be one reason why madder does not affect them — madder colours milk, as in the cow — the cartilages receive the colouring matter of madder — If madder were applied to the whole surface of the skin, this would be the best manner by which to determine on the fact of cuticular absorption — Dr. Colhoun experimented on the point, in a small way — Dr. Murphy made some very interesting experiments with the madder batt —

Madder is not an inert medecine —
It is found to render animals diseased, & sluggish — it has been recommended in Rickets — in the Jaundice it has been recommended — but I do not think it likely to be of service in this disease —
I have now done with the vegetable astringents — under the head of Mineral astringents — I shall here notice — Alum and Sacch. Saturni —
The first, Alum, is a ~~neutral~~ salt — Super Sulph — Aluminis et Potass. — it is diffused thro' every part of the world — it abounds in Penna. Maryland and Virginia — it was formerly supposed to exist in all the Mineral waters — Alum is a powerful

* What, it!

℞. Pulv. Canella alba. Pulv. Sulph. Alumin aa pr. viij. - Pulv. C. Peruv. ʒj
M ft pulv. 4 bine, in die. - for Hebrs Intermittens -

astringent — it has been used in some places in the process of tanning — Dr. Mac Bride recommends it for this purpose — it has been used as an astringent internally — its astringent powers are known to girls in Europe and I dare say in America — the success of astringents in Delirium Intermittens, led physicians to the use of Alum Lead — it has been used in combination with alum — also with nutmeg — Dr. Lind recommends this — Dr Adair used Alum with Canella alba in Intermittent with success — alum 7 grs. Canella Alba 7 grs — 4 times a day — (Remarks 74)

I have used alum in Intermittents, before the coming on of a paroxysm, combined with Columbo — Alum has been likewise used in small doses, in Cholera and Diarrhœa — In the cholera Infantum of this city, small doses of alum, — with Laudanum at intervals, has been useful; this is the case when it depends on debility — Alum has been used successfully in

Hemorrhages — Dr Cullen says he has not found it good in hemoptysis — he says astringents in the last disease are not always proper —

Dr Cullen used for in Menorrhagia

℞ Pulv. alumen ℥j
Gallar ℥ss Mix divs. X
add Laudanum if it purge —

X this is a compound of Rhei, alumen &c
Pulvis Stypticus

℞ alumen ℥iss
Sang Dracon or Rhei ℥ij M. —

In Menorrhagia

℞ Pulv aluminis ℥j Pulv gallae ℥ss rub with sugar
divide into divs. xij —

I have used Saccharum Saturni in this disease – but astringents generally are likely to do harm. In internal hemorrhages, Alum is good – Helvetius used Alum fused with Sang. Draconis and this mixture acquired some reputation – this mixture, it is said, is not soluble in all stomachs – I think the Sang. Draconis prevented the action of the alum – the powder of Helvetius was called Pulvis Stypticus – the Edinburgh College still retain it – Alum is good in menorrhagia – it must be used in small doses, as it is liable to irritate the stomach – we may begin with grs V and ascend gradually to ℈i – In our climate, Alum must be given in small doses – it is best prepared by rubbing it down with mucilage. In very large doses it sometimes purges ——

December 8th Friday

Dr Thompson speaks favourably of the powder of Helvetius – he says it is good in the floodings of women – in Catamenia I think alum is not good – a low diet be – should be attended to – in cases of Menorrhagia, I have used alum in combination with Galls – Pulv. aluminis ℥i Pulv. Gallarum ℥ss ~~℥ss~~ rubbed down with sugar and divided into 12 doses – this produces very good effects ——

Cymarhea

℞ Pulv. Alumyn. ℥ X

Aqua Rosar. Bviij

Mist. Injecta

Dr. Fowler has spoken of the good effect of alum in Scorbutic complaints — I think alum is good in scorbutic gums — Dr. Thompson says he has used the Helvetian powder in Fluor Albus — Dr. Cullen says he has never succeeded with it — I have often used alum combined with columbo or bark in that state of Fluor albus depending on debility, where there is little fever and the discharge not increased by a generous diet — From what I have said, you may well suppose that Alum is adapted to some cases of Gonorrhœa — I have used as an injection, Pulv. Aluminis, grs X Aqua Rosarum ℥viij vel X ℔ — a better injection may be made with alum in combination with Oak bark or Powder of galls —

Pulv. Galla or Oak bark ℥j
aqua fontis } ℥xx
vel Aqua Rosar. }
Pulv. Aluminis ℥ij ℔ f. injectio —

On the authority of Dr. Richard Mead alum has been used in Diabetes — if my ideas of this disease are correct, it may be used in the latter stage, as it now chiefly depends on Debility. It acts here by virtue of its tonic and astringent power. I am inclined to believe that some cases of Diabetes depend on circumstances, which may admit of cure by the use of Alum — it is certainly well adapted to some

Ophthalmia

℞ Aluminis gr. iv
Aqua Rosarum ℥j
Mft. Collyrium

cases of Diabetes — Dr Darwin thought this disease depended on debility of the absorbents and that alum was good, by its action on these vessels — I think it acts, in cases of debility, only by its tonic power — I am now to speak of Alum as it is used externally — The external use of this article has been more common than the internal use of it — it is often employed as a Gargle — Dr Cullen says he found it useful in Cynanche Trachealis — Alum has been used as a gargle in different sore throats — the external use of Alum in Hemorrhages has been great, but it is now less generally employed — Alum has been used in inflammatory affections of the eyes —
Ophthalmia Membranorum; in this disease Alum is useful as a wash — alum gr iij aqua ℥i —
The preparations of alum used in practice, its doses, and modus operandi are now to be considered — Of the preparations of Alum, there are a great number — One of them is called Coagulum aluminis — this is made by agitating the white of an egg, with a small piece of alum — this is used in affections of the eyes — it is best in chronic cases and in the decline of life — it is used by dipping a feather or something

Alum Whey.

℞ Cows Milk 1 pint — Alum ℥ij boil — separate the curd and make a liquor agreable with aromatics &c —

Armenian Bole is an astringent and was formerly used in Practice

of the kind into the mixture (which is a kind of lincture) and touching the eyes with it — I have employed it with success — Alum coagulates milk, serum, and other fluids — we have the serum aluminosum, made by boiling ℥iij alum in one pint of Cows milk — the whey is made to taste nicer by the addition of a little sugar

The dose of alum for adults is from 5 to 20 gr. — it is best to begin always with small doses — large doses excite vomiting, purging & it is said to occasionally when used largely, to bring on constriction of the intestines — in hemorhage it acts partly by its astringent power — Monro says it acts sedatively, by allaying the heat of the system — the effect of alum on the pulse have not been great — it sometimes raises the pulse

Plumbum or Lead

This is an important article in medecine — it is indispensible to physician — Cullen places it under the head of Astringent — it might be better to throw it among the class of Tonics — but, I will now speak of it, as

the last article of Astringent — I shall speak, 1st of its preparations — 2d — its operation in inducing disease — 3d — its effects in curing disease — Lead is universally distributed over the world — it is very abundant in the U.S. according to Newton it melts at 500° Fahr. but Mirabeau says it requires 594° to melt it — by a sufficient degree of heat, this metal is made to evaporate — this evaporised lead in some parts of the world, proves useful in vegetation by destroying various insects — Lead is easily calcined — when brought by fire to the state of calx, it is called burnt lead — when the heat is carried higher it is called Red Lead — this contains a great quantity of Oxygen — heat increased forms it into a state of Glass — Litharge is made by oxidating Lead and melting the oxide directly — some of the leads prepared by heat, are used as medecines — The white oxyd of Lead is a Carbonate of lead — it is made by exposing lead to the vapour of acetous acid or vinegar — a powder forms on the lead which is scraped off — this is the White Lead —

Goulard's Extract of Lead

Boil 4 lbs of litharge in the same quantity of dist vinegar

Acetate of Lead or sugar of lead usually appears in the form of small needles — it is made by dipping lead in distilled vinegar — it is to the taste, sweetish and hence one of its names — it's even agreeable to many persons — it has also an astringent taste — it increases the flow of saliva — the celebrated Extract of Lead, of Goulard, is made by boiling 4 pounds of litharge in the same quantity of distilled vinegar —

Of the Effects of Lead on the System —

One of its most dreadful effects is the production of colic of different kinds, as the Colica Pictonum, the Colic of Potters, Printers, Miners, &c —

It is necessary that I should say ~~say~~ something of this disease, though you will hear more of it from the Professor of the practice of Medicine — lead often produces palsy of the limbs as well as colic — I doubt whether lead be the sole cause of this disease — it is asserted that some wines that were adulterated with lead, did not contain but ½ grain in every gallon — I do not believe it — The Colica pictonum is not always brought on by drinking liquors which contain lead — this disease is very common in our city, to painters.

Colica pictonum is most frequently brought on by the vapours of lead — potters are subject to this disease, owing to the lead which they use in glazing their ware — printers are subject to this disease from their being obliged sometimes to work with heated types — they sometimes have pains of a rheumatic kind in their wrists — I have seen such cases — workers in Lead Mines are subject to Colic — Lead does not produce Colica Pictonum until it has been used a good while — I have known doors painted with white lead, to produce head-ache

The Cure of the disease depends chiefly on evacuating the bowels — bleeding is not often necessary — I have seen a case in which the blood was sizy — Crystals of Tartar and Oleum Ricini have been highly recommended in this disease — the latter medecine is an excellent remedy — very large doses of Calomel are good — Opium should be given after the bowels are opened — Opium acts often as a powerful Cathartic. I have found Cold water when dashed on the legs, to produce cathartic effects, when other remedies had failed — I have used Gum Guiacum with advantage in this disease — a salivation with mercury is often necessary in this disease ——

for dead wall lead

Another disease equally deplorable with the last mentioned is sometimes produced by lead — I mean, Gutta Serena —

The effect of lead is not always to produce Colic, or Paralysis — it frequently does no more than bring on Rheumatism — I have often wondered how lead produced this affection —

It is customary with the workers in lead mines to eat a quantity of hog's lard, before going to work in the morning and thus the lead exerts no deleterious effects upon them — It is very common at present in this city, with painters, to eat fat broth, or sweet oil with their dinner, in order to prevent any bad consequences from the lead — does it not seem probable that the Colic of miners is produced by the lead entering their stomach and not by its external action — The Malic acid when taken alone often produces the same effects that result from mixing it with lead — Cider produces pains in many, and shifts the seat of gout — effects similar to those are often produced by lead — lead to some persons is not deleterious — the proportion of potters and painters affected with Colic is not more than 1 to 40 or 50 — I have known 20 gr. of lead to be taken without injury —

In recent Gonorrhœa

℞ Acet Plumbi gr. iij vel plus ℥ vi - aqueæ ℥x Mft Injectio -

In old Gonorrhœa

℞ Acet Plumbi ʒi - aqua Rosarum ℥viij

The Smelters of lead in England are said to roast their meat, cheese &c. on leaden pigs, which gives their aliment a sweet taste; Sacch: Saturni taken to the quantity of ℥ss or ℥i does not produce deleterious effects — but the same quantity taken in small doses, is very injurious; in large doses, lead purges, vomits &c. —

December 11th 1809 Monday

Goulards Extract is hurtful in Erysipelas that tends to Gangrene — all external inflammation which is suddenly repelled by the use of Lead, is apt to occasion internal disease as Colic — Lead is often used in Burns — Mercury and Lead combined have cured scrophulous ulcers — in the scrophula gypsy people this may be useful — but in old persons — Lead is used in the form of injections in Gonorrhoea — it may be used here with advantage — authors differ as to the proportions of lead — I seldom use more than gr x to Aqua ℥x — In recent cases I use sacch Sat gr 3 sulph. Zinc gr vi Aqua ℥vi — much stronger injections are advised and are sometimes necessary — this is when the disease is chronic — here Di vacet Sat to Aqua Rosar ℥viij is sometimes used — we cannot prepare as good injections with common water as with those that are medicated as Rose water and some others —

~~as a many testicles in his belly? that's funny that~~
~~which many have been witness~~
~~of the Universe~~

+ lead fails of cure because we
~~cannot~~ continue it long enough
to do good

The Aqua Litharg. is often used as an injection in Gonorrhoea by using two thirty injections, Hernia Humoralis or a swelling of the Intestines is induced — we may expect this when the discharge is suddenly stopped — The Sugar of lead internally has been used in Fluxes, I will now speak of internal diseases in which lead has been used — the Tonic powers of lead would appear from its use in Intermittents — I have known lead in small doses to prevent the paroxysms of fever, — Sacch. Saturni has been employed in Epilepsy — especially that of young persons — Dr Rush perceived that lead did some good in a case of Epilepsy in the Penn. Hospital — but this case was afterwards perfectly cured by the use of Stramonium — in Pertussis, Sacch. Saturni has been used with success — ~~this~~ I have never used it myself — it has been used in London — I have succeeded with Salphine — Jno. Hunter recommends lead in Tetanus — Saccharum Saturni has been recommended in Mania, Hypocondriasis &c — I have not employed it in these cases — Lead with Camphor is used in Mania — Lead is used in Cholera Infantum with success — I have found it successful in my practice — Lead is also employed in Diarrhoea — I have not tried it much in this disease — Sacch Saturni is used with advantage in Diarrhoea with latent fever in the Intestines — Sacch. Saturni has been employed in Diarrhoeas in the decline of Intermittents — I have used it — Sacch. Saturni has been used in Pulmonary Consumption with small doses of Opium —

Lead ~ 120. Hemorhages

In internal Hemorhages –

℞ – Sacch. Saturni gr. i – Conf. Rosarum gr. iv. Laudanum gtt. iij –
~~m~~ ft. pill i – to be taken in the day –

Uterine Hemorhages

℞ – Sacch. Sat gr. i. ℞. Thebaic gtt. iij – ~~m~~ ft. pill i –

In Hemoptysis

℞ Sacch. Sat. ʒij – Pulv. g. arabic ʒj – ~~M~~ ft dos. vi – one every hour in molasses –

I have never known lead to be employed in Pyrosis –
I think it might be used in this disease with success –
of the use of Lead in Hemorrhage of Red Blood –
the use of lead in hemorrhage is not a new practice –
Dr. Heberden says that lead is entitled to the name of
a specific in Hemorrhages internally ——
Tinctura Saturnina has been used with Laudanum in
Uterine Hemorrhages with success – In internal hem-
-orrhage, Dr Reynolds used Sacch. Saturni gr. i – Cons-
-Rosarum – gr. iv – Laudanum gtts iij made into a pill – this
to be taken in the day – this was used in a man who had
spitting of blood – the medecine did not produce pain
in the bowels – he was cured —— a lady with hemorrhage
from the Uterus, used Sacch. Sat. gr. i R. Nitrati gtts iij made
into a pill – this was given with success – I believe the use
of lead internally to be less dangerous than imagined – it is
certainly a good medecine – I have never in my practice
seen any disadvantage arising from the use of lead in cases
to which it was adapted – I have used it in cases when
violent Hemorrhage followed Dysentery – the lead com-
-pletely cured it – in another case, hemorrhage su-
-pervened in Phthisis – patient lost 1 gallon of blood
at least by the anus – lead greatly relieved him –
In another case, the patient had Hemoptysis – 4 pints
of blood were discharged by the lungs – a large blister
was applied to the bowels – I gave Sacch. Saturni Dij
rubbed down with Gum. Arabic ℥i – divided into Doses vi –
one to be taken every hour in molasses – the bleeding
ceased and he got well – in Epistaxis or bleeding from
the nose, Lead has been used; a negro man with

In Spitans -

℞ Sacch. Saturni ℥ss viij - Pulv. Croci ℥ss i -

Hemorrhage from anus

℞. Sacch. Saturni ℥ss viij - Pulv. Croci ℥iii ℥ss i - Pulv. Ipecacuanha ℥ss iv -
rub down with Sacch alb - ℥ij - ℞ ft. dos. iv

Epistaxis, I gave Sacch Sat gr viij Opium gr i — he bled bucket full — by the use of so small a quantity of lead, his bleeding was entirely stopped, so sudden is the action of lead — in the autumn of 1815 I was called to see a printer with a violent fever — his pulse when I saw him was sinking fast — I did not know the cause of his weak pulse — I was told by a servant girl that he had passed by the anus 100 ℥ of blood at least — I immediately gave him lead with Ipecacuanha — ℞ — Sacch Saturni gr viij Opium gr i — Ipecacuanha gr iv — rubbed down with Sacch. alb — divided into 4 doses — in 14 hours he was much relieved — the hemorrhage was checked — he did not take more than gr x — Ipecacuanha is very useful — it is one of the best anti-hemorrhagic remedies — In Uterine Hemorrhage lead is excellent — it is better than bleeding in most cases — I called to see a Lady who had been flooding 14 days — she had a flush in her face when I saw her — I wished to draw some blood, but she refused it — I then gave Sacch Saturni gr ij with Opium — the hemorrhage was quite stopped — it reduced also the flushing the face and her irritated pulse — I consider Hemorrhage as active and passive — may not Sugar of lead be used in Abortion with advantage — I think it may — when the hemorrhage is great, lead is the best remedy — In 1802 I was called to see a pregnant woman — she had great floodings — was senible — but on the eve of convulsions — I gave Sacch Saturni gr ij in 5 minutes by the watch, she was greatly relieved — another small dose completely stopped the hemorrhage —

* what has all this to do with the modes operandi of Leader

December 12th 1809 Tuesday

Mrs T— had her catamenia at 12 years of age — she married very early — had her catamenia very regular for a long time — in her first lying in, she was mismanaged — after this she had her monthly discharges in a very irregular manner — she submitted to a low diet — she was very much reduced — I prescribed Vinum Chalybeatum without any good effect — I then gave her Sacch Saturni with Opium — this had the desired effect — her profluvium was arrested — in time by habit the lead lost its power — I tried the effect of Ipec — I afterwards gave lead with Ipecac. — I consider Uterine Hemorrhage as dependant often on great arterial excitement — in these iron is always hurtful, lead is the best remedy —

Modus Operandi of Lead — It does not act by its tonic power — if this were the case we might expect to derive good effect from iron — Haxglove has been used without advantage — Ipecacuanha is very beneficial — from the success which has attended the use of Leadin my practice, I recommend it to you as one of our most important medecines — particularly in hemorrhages from the Intestines and Uterus — its acts powerfully even on parts that are remote — I have never found harm to result from the use of Lead — cold water or Ice has been used in Uterine hemorrhage, but from actual experience I am persuaded lead is far preferable — There are cases of Hemorrhage in which neither Lead nor Ice can do good — in these we must use mechanical means —

Digitalis has been of some advantage ~~to~~ in hemoptysis where the hemorrhage is accompanied with arterial action —

Lead act differently from what has ever been supposed —

1 The preparation of lead succeed better than purging, bleeding &c — to any extent, in some cases —

2 The lead cannot act by its sedative effects — for the Digitalis which lessens the pulse much more than lead is seldom successful in hemorrhages — in passive hemorrhages as the malena, hematuria &c whether in adult or children, the sugar of lead is the most important remedy — I have found it successful in malena when the patient had Typhus ——

The operation of Lead and Ipecacuanha is very different — it has some property different from that of merely lessening the pulse — this must be derived in part from its astringent qualities — many astringents though stimulant have been found good in hemorrhages —

Dr. Thos. Smith's experiments to prove the action of lead — the crural nerve of a frog was laid bare & a solution of common salt applied to it, which roused it into action — this solution was removed & a solution of Sacch. Saturni applied which arrested the action — this being removed and the salt applied the actions were renewed — Although lead is an astringent medicine yet no theory respecting the astringent principle, warrants us in the belief that its operation in hemorrhage depends on its astringency ——

1011 120

I have supposed that all medicines acted as stimulants but lead seems to act as a sedative – I confess I am obliged to give up a part of my former opinion on this point – Lead acts on the nerves through the medium of the stomach – and thus affect the stoppage of hemorhage ——

I advise you to follow my directions in the use of Lead; vie from 1 to 6 gr, in hemorrhages — combined with a little opium — with respect to the dose of lead, we must regulate it, according to the patient's constitution — the largest dose of Lead I ever used was 10 gr — with gr 1 opium — I have heard of 20 gr being used in 36 hours — In arterial hemorrhages it exerts its good effects in small doses — 4 or 5 gr of lead often do more good than drawing 50 ℥ blood from the arm — I have now ended the subject of astringents ———

Of Tonics

Dr Cullen says these act by giving tone to the system Dr Darwin calls them sorbentia — I prefer the term Tonic — By Tonics I mean such medecines as give general strength to the system without increase of heat, and that whether applied externally or internally — Opium and Wine are called Incitantia — it is the character of tonics to give more permanent strength than the Incitantia do — heating medecines do not produce permanent effects, as wine &c — by Tonics, I do not mean, medecines which merely increase the strength of the system — when our stomachs are out of order, we find relief from Columbo &c — which are then called Tonic — but sometimes the stomach is morbid and the appetite craving — whatever medecines bring the stomach to its natural state are Tonics, as Rhetis &c ———

+ also stimulating ~~astringents~~ — as Serpentaria

1 Astringent
2 Bitter
3 Bitter & astringent
4 Bitter aromatic & sometimes stimulating

December 4th 1809 Thursday

I shall consider the Tonic medecines under three different heads - viz Astringent Tonics - Bitter Tonics - + and these two in combination - It is the opinion of many that tonics act exclusively on the muscular system - this is the opinion of Dr Gregory - the tonics excite a strong effect on the heart and arteries they therefore produce effects analogous to stimulants - they operate in some degree on the nervous system - with regard to these medecines and the astringents already spoken of, we are enabled to throw light on the systems of other animals besides man - the tonics exert a peculiar effect on vegetables as well as animals - solution of lead, tinct produce a powerful effect on vegetables - as plants are not known to have ~~ner~~ nervous systems, it has been inferred, that the operation of tonics in animals is on their muscular fibres - who will say that plants have any thing analagous to muscles - Brown was the first who introduced into his lectures the subject of the operation of medecines on plants in connection with Animals - the cellular membrane is extended widely in the human body, and appears to be the seat of that life which is called contractility - when this last is perfect, there is sound health - when diseased it gives rise to various affections as dropsy - the operation of medecines on this cellular membrane should be attended to; tonics give it strength and firmness -

I think it is probable that vegetables have nerves — there is no foundation that tonics act solely on the muscular fibre — they operate on animals without muscles — and in plants without nerves — they exert their effect on all active parts of the system — such as possess irritability, sensibility &c — the cellular fabric is one of the media, through which tonics act on the system — I recommend to you the Practice of Physic of Cullen —

There are bitters which do not possess any tonic power — some of the most powerful tonics possess little bitterness as Muriate of Barytes — Iron, Copper, Bean-Bark — Galls have no bitterness; they often cure intermittents —

Riding, exercise &c are powerful tonics — cold baths are tonic in hot climates — a well regulated diet is the most permanent of all tonics — this varies with different people — with some a vegetable diet is tonic, with others an animal diet — regular evacuations of the system as discharges of feces, bile &c are tonic — certain affections and conditions of the mind are tonics — venereal appetite well regulated is tonic — fear, grief &c on many systems act as tonics — Had it not been for the Ambition of Cesar, he would have fallen a victim to an Epilepsy to which he was subject — anxious expectation to a certain degree is tonic — joy has arrested an intermittent fever — pain is tonic in some cases — it gives a man courage said Dr Priestly —

It has been asked whether the Tonic power of medecines is owing to astringency — this is not easily answered — there are many medecines both astringent and bitter which are not tonic — and vice versa —— it is probable that the tonic principle like the astringent is composed of different substances —— the tonic power is often obtained by mixing bitters and astringent — The Tonic power of Peruvian Bark is increased being mixed with Camphor and Virginia Snake root — All Tonic are stimulant — Sometime we cannot owe the ~~astringent~~ tonic power to anything else but heat — as the warm bath — Dr. Cullen says, medecines do not act as tonic in the cure of Intermittent — because they do not increase the pulse — I must observe that every tonic medecine has the power of stimulating the system — in many cases the operation of tonics is independent of astringency — many simple bitters do not act on the heart and arteries — It is not right to deny the stimulant effect of medecines, merely because their action is not evident on the pulse — the Uva Ursi is an example of this — the stimulus of Uva Ursi is as obvious as if it had the greatest effect on the pulse — different Gentians are bitter — the Yellow Gentian is one of the purest bitters we know of — it is said to do harm by its heating quality — it is evidently Stimulant — the Stimulant power of different Barks is discussed by Dr Walker, Rigby, Rice and others — bitters are different in their power of stimulus —

A great ~~portion~~ proportion of the articles of the Materia Medica appears to be Stimulantia or Incitantia — that any medecine does act by a direct sedative power I can hardly believe — many physicians agree that Opium is a stimulant — I do not believe that medecines exert their effects exactly in proportion to their stimulating powers — I do not know who first said that all medecines were stimulant — I find it as late as 1786 — in Sylvester Douglass Dissertation — all the bitters, tonics whether vegetable or mineral are stimulants — they operate in part by a stimulating quality —

December 15th 1809 Friday

Tonics

Nitrate of silver and acetate of lead precipitate the bitter principle — it is said the precipitation is not occasioned by the presence of Muriatic acid — the bitterness of bodies is a peculiar indivisible principle — Dr Cullen says bitters are inodorous — I deny it — Some of the strongest bitters are rich of aromatic qualities — but bitterness and the aromatic principle are combined in many bitters, as Snake root — there are aromatic bitters — the bitters are employed externally and internally — I do not mean the pure bitter principle — I mean bitter tonic medecines — they have been recommended for cleaning and healing foul ulcers —

It has been said that bitters generally contain something deleterious — the narcotic power of opium does not reside in the bitter principle —

many of them are antiseptic and arrest gangrene — but those which are stimulant do harm in gangrene — Dr Cullen says an obvious property of bitters is, when taken into the stomach, they increase the appetite and digestion — this is certain in many cases — It is probable that Dyspepsia is owing to the Gastric juice being secreted of a bad quality — Dr Darwin thought the bitter medicine increased digestion by promoting the absorption of chyle — they do this indeed but I do not agree in this as a general rule — the bitters produce appetite by stimulating the stomach and the Gastric juice — bitters were formerly recommended in visceral obstructions &c — In costiveness, bitters have done good — In sedentary persons, costiveness depends on a torpor of the alimentary canal — here bitters are useful — The bitters are stimulant and perhaps there is no stimulant that does not exert a diuretic effect — the bitter artichoke — lettuce root &c are diuretic — opium is often diuretic — Bitters have been employed in Dropsy combined with alkaline salts — The bitter almond has prevented the paroxysm of fever — bitters are said to be good in continued fevers — here the hot bitters are injurious — after bleeding has been used freely, bitters are useful — In the malignant fever of 1793 the bitter chamomile was very useful after bleeding, purging &c —

S. Febris Alva –

In some cases of Dyspentery bitters have been used with success — a purgative quality belongs to almost all bitters — Dr Darwin says that bitters have been used successfully in ~~Febris Alba~~, vulgarly called Chlorosis, especially when assisted by low diet — of the anthelmintic properties of bitters, I shall speak towards the end of this course of Lectures — bitters frequently used, destroy the tone of the stomach — Many bitters possess a narcotic quality — some are deleterious as opium &c —

December 18th Monday

Tonics - Vegetable

Gentians - There are many species of Gentians — I shall confine myself to a few of them only — The Gentiana Lutea is the Gentian of the shops — this is a native of the old world and is never found in America — this species is the most important of all the bitters — Quassia can hardly be compared to it — it is not a nauseous medecine — spirit extracts more of its virtues than water — our vegetable is very antiseptic — many virtues have been ascribed to it — said to be good in debility of the stomach, nervous fevers &c — said to dissolve tenacious phlegm — it does certainly create an appetite —

Elixir Stomachicum of Rosenstein

℞ Cortex aurant ℥vi
Ext Gentian ℥ß
Vini Oporto ℔ij
digest — dose ℥ß several times in die -

Tinctura Stomachica

℞ Cort Peruv ℥iv
— Aurant
Rad Gentian an ℥iß
Opt vin Gallici ℔iv
Mf digest — ℥ß of this into ℥ij of
water every morning

The Gleet. Leucorrhœa &c -
℞ Rubiæ Tinct ℥ss v Rubr. gentian ℥ss v - mft pulvis -

Dr Whytt speaks highly of this medecine - I recommend to you Dr Whytt book on Nervous diseases - The Gentian extracted by spirit and combined with some aromatic is the best preparation - Yellow Gentian has been found to prevent the paroxysms of gout - it enters the famous powder of Portland - Linnaeus says it has relieved Calculus - some writers assert that our Gentian is a febrifuge - Dr Lind says that from 10 to 20 gs of Pulis Gentianae with R. Sacrum has cured Intermittents - I have long used Gentian in powder believing this to be the best mode - I think it is equal as a tonic to Columbo - it is one of the best vegetable tonics - our Gentian has been recommended in Scrophula - the gentian has been recommended in cases of worms - it is one of our best and most valuable bitter medecines - I use it combined with rust of iron in Gleet, Leucorrhoea, Dyspepsia &c Pulv Gentianae gr V - Pulv Gentian gr V -

The Gentiana Centaureum is a native of Europe but has been found in this country - it is chiefly the stalk and leaves that are employed - it is very bitter, but has little smell - its virtues are extracted by Spt. Vini - water extracts the mucilage -

Gentiana Linealis - narrow leaved
gentian is found in Virginia —

× Frasera Officinalis — it is not
the true Columbo —

Professor Murray prefers the Gentian - Dr Murray says it is antiseptic - Dr Cullen says it is an inferior kind - the Centaury purges - the effect is obtained by boiling ℥ij in aqua ℔ viij - it possesses tonic powers - has been used with advantage in Quartan fevers - it is said to be injurious by increasing fever - The Gentian has been used in Gout - is recommended in Jaundice or Icterus - our country possesses several species not inferior to the foreign Gentians - in Dunnyhani, New Jersey &c there grows a species with narrow leaves - it has been used in Colic with success and hence supposed to be narcotic - The American Centaury is different and much better than foreign ones -

× Columbo of Kentucky, which &c - is similar to that of the shops - it is but little inferior to foreign ones - it exists in great plenty in the United States - I knew it in 1797 - I found it in Genesee in the state of New York - the root is very large - sometimes as large as a man's arm - the proper time for taking it up is when the flowers have fallen off, which is about August - it is a very pure bitter -

Quassia is found in Surinam
and parts of South America —

+ but the apothecaries throw the bark
away

In Dropsy and fevers
℞ Quassia ℥iv. aqua th̄ iv̄ boil to th̄ ī - dose a wine glass for
an adult -

Quassia — a few years ago, a very few species of this were known — it was first discovered by a black slave whose name was Quassy, hence the name of this article — there are now many species known — Quassia Amara, Quassia Polygama and Quassia Simaroubo — Quassia Amara grows in South America, in Surinam — it is very bitter and is said to be inodorous — I deny this — it is not nauseous — the bitter quality resides in every part of the Quassia — it is much stronger in the bark than in any other part — the root and wood is very bitter — 1 oz of it impregnates 1 gallon of boiling water — from experiment it appears to be a very good bitter — it is not so bitter as the Colocynth — and is little inferior to yellow Gentian — this Bark is not a general antiseptic — I am now speaking of the kind used in the United States — I am to speak of the use of Quassia in diseases — it is used in the Remitting Fevers of Surinam — also in continued fevers — it is used in combination with Snake root — Mono used it in fevers with success — Mr. Long recommends it in dropsy and fevers — ℞ Quassia ℥iv. their aqua ~~℥ii~~ boiled down to ~~℥i~~ th i — a wine glass for an adult — a decoction is made of the wood —

Quapia has been used in the Carpenters of Pater —

× Dore 15 8 6 3/4

Dr Lettsom says it is good in diseases of the stomach and nervous debility, hysteria &c — Dr Chovet used it in combination with many articles, — he wrote very long prescriptions — in his day a long prescription was considered the best sign of a ~~smart~~ smart Physician — simplicity in writing prescriptions should always be your aim — I hope you will write short ones — I seldom use more than 3 articles at once — if a 4th come in, it is a syrup or something of that kind —

Quassia has been used in Gout by Sandiver, Bergius — In Dyspepsia, and laxity of Intestines Quassia is very good — Quassia has been used in Diarrhœa, combined with Laudanum — I have employed Quassia frequently — I mostly use the watery infusion — patients will use Quassia longer than any other bitter —

× The Quassia Polygama grows in the West Indies — it differs little from the former — I have never seen it — In Jamaica, it is used in Dropsy — in the form of a Tincture — it is used in Amenorrhœa — Chlorosis, Dyspepsia & in a disease of vitiated appetite, called ~~Pica~~. Pica —

* What a stupid mistake, the man might keep his Ideas in his head until he writes 3 pages –

December 21st 1809

Quassia Simaruba – This grows to the size of a large tree in the island of St Domingo – In Jamaica it is called bitter Damsel
this vegetable does not appear to possess any astringency or mucilage – it is a pure and simple bitter – Spt vini or aqua extract its virtues –
It has been used in France in Dysentery with great success –
It has been recommended in all diseases in which bitters have been employed –
It is used in Hemorrhages – said to be used in the ~~early~~ latter stages of Dysentery when there is little or no fever present and when the gripes and Tenesmus depend on Debility –
Sir Jno Pringle used it in Diarrhoea and also Dysenteries – used in fluxes of every kind –
It has been used in Diarrhoea to the quantity of ℥ij or iij every 24 hours by Dr Cullen – he says he has not found it useful in Dysenteries –
Habitual colics attended with fever and delirium have been relieved by the use of our medecine –
it is said to be a good vermifuge ——
The Columbo we formerly spoke of was indigenous foreign produce – we have come to speak of that which is indigenous foreign to our country –

Columbo — this article which is so common a use has been long known — it is spoken of as early as 1765 — the diligence of Botanists has not been able to discover the vegetable of which this is the root — It is a native of Asia — it is a strong and disagreable bitter — its taste is somewhat pungent — but it may be rendered agreable by the addition of orange peel — it yields its virtues best to spt: its virtues reside in the resin —
Dr Percival found that Beef kept longer from putrefaction in Barks than in Columbo — consequently he inferred it to be less antiseptic.
He thought that in the yellow Fever of the West Indies (of which he was ignorant) Columbo would be good — he believed Columbo not to belong to the heating bitters — I believe it is a stimulating medicine — Every Physician finds it necessary to attend to the pulse when he administers Columbo or Gentian — Columbo is used in Intermittents — I have used it in fevers of this kind and am favorable to the use of it in Many Cases — those to which it is adapted are, persons whose constitutions are very delicate and in whom the chill is not violent — The late Mr Rittenhouse was of this kind — I cured him of an Intermittent by the use of Columbo —
I have used the Columbo in Pulmonary Hectic Fever — it must not be given in a paroxysm, but during the Apyrexia —

Dr Cullen says he has used Columbo in Dyspepsia with advantage — it must be given in large doses and persisted in for a long time — it is best used in substance — I often prescribe it in combination with different preparations of Iron, as the Carb. Ferri — Columbo is used in Dysentery — Dr Cullen says the use of Columbo in this disease has not obtained in Great Britain — it has not been much used in the United States — I do not think it is adapted to the early stage of Dysentery —

Columbo has been used in diseases of the Stomach by the natives of those countries in which it grows — it is likewise used in Cholera Morbus —

Dr Monro says Columbo is good in biliary disorders — Dr Percival recommends it in severe vomiting & in diarrhea accompanying dentition in children — with respect to the dose of Columbo, it must be regulated according to the age and circumstances of the patient — to an adult 4 or 5 grs — 4, 5, 6 times daily, may be given — the dose is sometimes as great as ℈i, 3 or 4 times daily — from too large doses of Columbo, I have seen much injury — In one case Constriction of the Chest was produced — I have had little experience in the use of Columbo, except given in Substance — it may be used in form of Infusion the watery Infusion is very perishable —

Tinct. Colombo

℞ Rad Colomb. ℥iss
Spirit – ℥ xxxij

digest ——

An Infusion of Rhubarb has been used as a tonic in Dyspepsia ——

We should prepare a very small quantity of the water. Infusion at once — we cannot too much discourage the use of the Spt. R Columbo or any other bitter, especially in females — all drunken females are said to be made so by the Doctors. —

Xanthoxyla — the medical properties of this plant were first investigated by the late Dr Jas. Woodhouse — the bark and wood of this plant are very bitter — the Dr. thought it little inferior to Columbo — when laid on the tongue it produces some pungency — it may be used in powder, infusion or decoction — this plant is found in various part of the United States —

Hydrastis Canadensis — called also yellow Root — it grows on the Ohio — it is a valuable bitter and is employed in the Western country —

Hellebores Fœtidus is used in New York — I have not published any account of this plant, but I promise to do it hereafter — it is used in Dropsy and some other diseases —

Lichen Islandicus a species of moss, known in some part of the name of Iceland moss — this plant is found in our country — perhaps it may be found on the rocks of New Hampshire — it is found between Latitude 40° & 50° in abundance — this plant is very mucilaginous and by being deprived of its bitterness and boiled in milk, it yields a good pottage — ℥j boiled in a quart of water, yielded ℥viij of mucilage — I know nothing of it from my own experience — it possesses a little astringency — it has been much used lately in Consumptions of Lungs — Bergius prescribed it in Consumption, and found patients to get well under the use of it — it is boiled in milk and given to patients as their only diet — said to be less beneficial in those Consumptions which are attended with Inflammation than such as depend on debility — It is said to relieve the cough, restrain the sweats & lessen the diarrhea in Consumption — the authorities in favour of this medicine are highly respectable — it seems to me very probable that it may be good in some consumptions, especially when the lichen is pure and good, which is very seldom the case as we receive it —

An Extract of Camomile has been in use, but I can say very little of it —

December 22d 1809 Friday

Chamaemelus – of this there are many species in our country – I am now to speak of that which is most common the

Anthemis Nobilis – the flowers are the part which is used they yield an essential oil and are somewhat bitter – this is much celebrated as a stomachic medecine – the flowers have been much used in Intermittents, in powder – Dr Hoffman entertained a great opinion of it – ℥ss. 3 or 4 times was given in an Intermission – Dr Cullen has used the flowers – given in too large quantities they are said to run off by stool – Sir Jno. Pringle found an Infusion good in Dysentery – it is probably useful (as Cullen says) by moving the bowels – it is one of the most grateful of the bitter medecines ——

Lupulus Communis or Hop – This is not so pure a bitter as some of which I have spoken – it is used in making malt liquors – the medicinal properties of the hop are not much known – it is said to be an antilithic – it is said that since the addition of hop to malt liquors, there have been less calculous cases in London, but Dr Sydenham seems to think otherwise –

Dr Darwin says the bitters promote digestion by the absorption of chyle we have this before

It is said the Hop may produce Gravel — the famous Erasmus had ~~grand~~ gravel and he said it was brought on by the use of malt li-
-quors —

We are told of a man who cut 1400 persons for the stone - not one of which had used malt liquors, but wine — I think malt li-
-quors do lay the foundation of Nephritis in many persons — I know this by experience —

Porter is injurious by the hop it contains, be-
-cause it is likely to produce calculus - the hop is a tonic medecine and the infusion has been recommended in debility, in Febris Alba &c — I believe the tonic power of porter depends on the hop it contains

It is said that Porter drinkers are less often assailed with Intermittents, than those who drink Brandy — Porter seems well adapted to low Typhus fever — but by a constant use of it, the Constitution is much injured — more so than by wine — ~~with~~ hop is certainly endowed with narcotic qualities and it might be placed among the narcotic medecines — the vulgar have fancied that hop pillows would

* Dr B. is vulgar Name

Smit H Hops
Op Lupuli 3 p
Spt Vini 3 8 —
digest

produce sleep — Linnæus appears to be the first who spoke of its narcotic quality — the effects of porter on the pulse depend on the hops it contains —

Every Narcotic is a Stimulant —

Tincture of Hops is a good substitute for Opium in many cases — 60 gtts ℞ Lupuli are equal to 20 gtts ℞ Opii — the tincture of hops agrees with many who cannot take Laudanum — I have been obliged to lay aside Laudanum in my own case and to use the ℞ Lupuli —

The following formula is the one I have used and which I recommend to you —

℞ Lupuli optimi ℥iij.
Spt vini — ℥viij — infuse the hops in the Spt for a week, agitating it frequently — keep it in a temperature of about 80° Fahr. decant it off for use — the taste is intensely bitter —

Tanisatum or Tansy — this is a powerful bitter — it was formerly used in Gout — Dr Clark recommends it in this disease — I advise you to read Dr Gardner's treatise on Gout — of the anthelmintic properties of tansy I will speak hereafter —

Artemesium Absynthium or Wormwood is a strong bitter and is used as a tonic in many cases —

The name Cinchona is derived from Cinchona a Countess, who used the bark in a fever with success — it was sent to the Jesuits and being used by them was called Jesuits Bark — called also Cardinals Bark —

an Indian being ill of a fever and very thirsty went to a pool and drank freely of the water, around which the Cinchona grew in abundance — the water was thus impregnated and cured him — others followed this example with similar effects —

I have now finished my history of those bitters in which there exist ~~some~~ no astringency — I am now to consider those medecines of the vegetable kingdom, in which the astringent and bitter principle is are combined. and first of Peruvian Bark — this medecine shall occupy at least 3 lectures — it is one of the most important and indispensable medecines — it is one of those medecines which were not known before the discovery of America — it has not been found in the old world — a few years ago, only 2 species were known — The Cinchona lancifolia, or officinalis of Linnaeus was employed by Dr. Sydenham and was the first sort that was used in Europe — this is the Pale Bark of the shops — called lancifolia because its leaves are shaped like a lancet — the tree from which the Peruvian Bark is obtained, is a native of America — it grows very high and is sometimes as thick as the human body — the common diameter is 6 or 8 inches and the height 12 or 15 feet —

Cinchona oblongifolia — the leaves are of an elliptical form and the tree grows to the height of 120 feet — the trunk is 4 feet 6 inches thick —

+ this tree is of small size not more than
12 a 15 feet high —

Cinch Cancifol — pale bark
— Cordifolia — yellow do
— Oblongifolia — Red do

It is a native of Peru and is found in Santa Fè - this tree affords the red bark - this specie does not appear to have been used before 1729 - it is less worthy of notice than the Pale bark - because it is so often adulterated -

Cinchona Cordifolia - called by Ball - Cinchona pubescens - the bark of this specie was not known before the year 1740 - I do not know certainly from what specie the Yellow Bark is obtained - probably from this or Cordifolia -

Cinchona Carribei - this specie is not much employed - The Europeans did not discover the febrifuge virtues ascribed to it -

I will give you some directions for selecting barks of all kinds - the most powerful, is that which is obtained from the oldest trees - from the trunk - the bark after being well dried, if secured in trunks from moisture, acquires strength - Bark preserved in shops for years instead of growing worse, grows better - large fragments are more liable to spoil than small ones, because they absorb more moisture -

+ Do you ever collect it

* So it is but it Dr. Rush's place to correct it.

December 26th 1809

Peruvian Bark

If much advantage could be gained from the chemical analysis of Bark, I would detain you with it – I refer you to Thompson's Chemistry on this subject – vol – 5 –

The bark is one of those substance, in which the bitter principle and astringency are obviously combined –

The Bark is a very powerful tonic – the operation of the bark on the stomach, demonstrates its Tonic power – In Dyspepsia it is an excellent remedy – the bark in this disease certainly operates as a tonic – when the bark cures Intermittents, it is certainly by its Tonic power – astringent have cured Intermittents, as Galls – Dr Sims of London says that the operation of bark, must be owing to some principle unknown – I will for a moment admit that bark does not operate as a tonic – it operates by some unknown power – In Intermittents the bark operate, by producing a new disease – I candidly declare I do not know its operation – I now proceed to consider its use in different diseases –

Ever since I have read Lectures, I have considered the Practice of Physic as connected with the Materia Medica –

Intermittent Fever

It is not my province to explain the nature of these diseases — The question has been asked — At what period should the bark be given with most safety and advantage? Dr. Boerhaave says, give it when the fever has existed long enough to do harm — I think we should give it as soon as possible — give it after the first paroxysm — I shall speak of pure Intermittents in which the paroxysms do not appear attended with great danger — The physician has no business to wait for a repetition of the paroxysms — Dr. Sydenham thought it was necessary to wait until a fermentation was produced in the fluids before giving the Bark — The bark may be used with entire safety immediately after the first paroxysm — I could give you many opinions of different physicians to prove this — I recommend to your perusal "Lind on Fevers" —

I believe many patients are subjected to Dropsy by neglecting the timely administration of Bark — I believe the mildest Intermittent partakes sometimes of Inflammatory fever — in these I think it unsafe to give the bark until venæsection is used — otherwise the bark will not be apt to good — In an autumnal intermittent fever I had to bleed 8 times before I gave the bark — I am persuaded that it is best to use some evacuation preceding the use of bark, this is the result of my own observations — the common practice has been

to give an emetic, as Dr Cullen said to excite the action of the stomach —
I do not believe it necessary to create activity of the stomach; we should guard against it — it is often the very reason why we cannot succeed in getting bark to lay in the stomach —
I do not assert that emetics are always improper before the use of Bark — they are sometimes necessary — but they are not the best evacuants we can use — we may use emetics when there is little pain in the head — where diarrhœa is present, emetics are certainly good as preparative to the use of Bark — in intemperate men emetics are best before the use of Bark —
Purgatives are certainly the best evacuants before using bark — one of these is Calomel 15 grs — sometimes combined with some other medecine —
Jalap is much less useful because it disposes to nausea —
Colocynth is good as an evacuant —
I mostly convoin with the Bark a small quantity of Rhubarb and I think it a good mode — in my practice I have been governed by my fear of costiveness —
Bark often stops an intermittent even when the Rhubarb purges — this I know from experience —

* It tends to prevent the fool

Many writers condemn the practice of giving Cathartics with bark — Wersenius is one of these — I never give strong Cathartics with bark — merely enough Rhubarb to keep the bowels gently open —
It was formerly a custom to give small quantities of Bark a little before the period of paroxysms — some eminent practitioners have ~~applied~~ opposed this practice, but Cullen says it was only from theory they did so — Cullen's Materia Medica —
he wishes bark to be used just before a paroxysm — this I think is very improper — it tends to increase the violence of paroxysms — the Stomach at this time is very irritable — and here bark often produces puking — I do not deny that the bark should be given just before a paroxysm but this is when the paroxysm is of short duration —
Professor Home says the Bark should be given just after the hot fit goes off — he says a considerable time is necessary for its operation — he thinks its effect depends on its action on the blood vessels —
May the Bark be given with safety during the hot stage?
Dr Clark says the cure of Intermittents depends on giving the Bark without any regard to remission, intermission, exacerbation or any thing else —
I have never internally given the bark during the hot stage — it is a very injurious practice —
I have heard of but one physician in this city who

used to give bark during the hot stage — this Physician is now no more —
There are some cases in which bark may be given during the hot stage — it is much safer to give it in the hot stage in tropical climates than in cold ones — it is entirely unsafe to give bark during the hot stage if the patient have not a moist, hot skin — the moisture of the tongue should be attended to in the administration of Bark — I have seen Bark succeed in the hot stage when the tongue was moist —
Ultimo, I have been treating of the use of Bark in simple Intermittents which do not assume dangerous forms — I am next to speak of those which wear a more violent aspect —

December 28th 1809 Thursday

Peruvian Bark

I am now to speak of the use of bark in more dangerous Intermittent — While the paroxysm exists, the patient is often insensible and actually labours under apoplexy — the pulse is oppressed — the pulse is sometimes remittent and sometimes Intermittent — when intermittent, the apoplexy departs — if it be remittent, the patient labours under the symptoms already mentioned — in the remission the patient looks wild — I would call it Febris Remittens Apoplexica — the bark appears to be well adapted to this species of fever — but I rather think the bark ought not to be given in many cases until after bleeding — be this as it may the bark is the grand remedy — In the Intermittent fever which appeared under forms of Sleepiness the bark succeeded — The great dependance of the Physician should be on the bark, paying attention to the Apoplexia. Intermittents are often combined with Catarrh — or as I might say, Catarrh puts on the Intermittent form — this was the case in the Influenza — this disease was cured by the bark — nearly allied to this is the Asthmatic Tertian of the bark is of service in the remittent as well

as the Intermittent — these fevers often arise from the same cause — marsh miasmata — these diseases are the same and only varieties of a common species — an opinion very early prevailed concerning the bark, that it should not be given during the paroxysm — I have said this was true in most cases, but not in all — the Bark ought not to be given in Remittent until purging and bleeding are used — this applies to our Climate — in hot countries it may be given without previous bleeding —

Typhus fever — this has been supposed to arise from one common cause — the state of the human effluvia — it is constantly the result of irritating matter acting on the system — it appears to be at first inflammatory — as the bark in this disease is a good medicine, I wish to give you some directions as to the time of giving it — we must be governed by the pulse — the evacuant plan may be carried on for some time previous to giving the bark — it must not be given while the pulse is full, the eyes suffused and symptoms of Phrenitis are present — the time of remission is the period for giving the bark — volatile alk — I have always chosen the remission —

the indiscriminate use of barks in all stages of Typhus does harm — in the advanced state of Typhus where there is delirium the bark must not be given — here opium is a sovereign remedy — the bark can hardly be called a good medicine in Yellow Fever

Typhus is certainly contagious, tho' I do not think Yellow Fever is contagious — I attended a family with Typhus and in a short time 24 persons in the neighbourhood were afflicted with the same disease — 1796-7 —

In Yellow Fever bark has been tried, but is not successful — the bark has been used in the Plague and has been successful — Dr Mirken says bleeding did harm in this disease, but in plethoric patients he thought it might answer — Dr Mackenzie with Boggan practice, many of which were in the plague, says the bark proved successful in many cases — —

Dr Cullen mentions a genus of fever called Synocha — in this fever, the bark is improper & dangerous — this fever attends phlegmatic and topical inflammation — most agree that bark is improper in all inflammatory fevers — Senac used bark with success in Pleurisy attended with Intermittent fever — the bark has been used in cases of acute Rheumatism —

Dr Morton has used it in this disease - as it depends on what is called Diathesis Phlogistica it is said that bark is very improper - but says Cullen after the inflammatory symptoms are reduced, the bark may be a safe medecine - but caution is certainly necessary -

In Rheumatism, combined with Intermittent fever, Cullen says the bark is useful - of the use of bark in acute Rheumatism I have had no experience - Some English Physicians give it with advantage in this disease -

Dr Haygarth recommends the bark as the best remedy in this disease -

Dr Fothergill mentioned the connexion between ague & Rheumatism - in both, the urine deposit a lateritious sediment -

In Rheumatism of the Jaw which is periodical the bark given during the absence of pain may be very useful -

From my own experience I am convinced that Rheumatism is often attended with alternations of ease & pain - during the remission of the pain, bark is useful

In Rheumatic affections of the head, the bark given in the remission of pain is successful -

I mention this with confidence —
In the Rheumatismus Hystericus or dolores hysterici the bark is a good medicine —.
I have never seen this disease as I know of — Dr Cullen says it will not admit bark because there is no crust on the blood — the bark may be given in many cases of Inflammation —
out of 100 cases of yellow fever, there were but 3 in which the blood had the Inflammatory crust — until the month of October —
Gout — Dr Gregory says that bark may be given in this disease — Dr Gardner says it is injurious —

The bark may be used when the gout depends on great debility — when it assumes the Intermittent form, as in my own case, a dose of bark translated the disease to my chest producing violent pains —
In the Intermittent Gout, bark may be given during the Intermission — but it is only safe in those cases where the patient has not been subject to a translation of the disease to vital parts — Dr Mott says his case of Intermittent fever was cured by taking Tart Emet. gr 1 during the intermission and then a dose of bark —
Cephalgica & Hemicrania — in the former nothing is better than Bark; this is the case

where the pulse is full and the constitution Plethoric - I have known it succeed after blisters had failed - in many cases bark is the sovereign remedy — it should not be given while the pain is present —

Hemicrania - this disease is frequently of a Gouty origin - I have known a case in which Hemicrania was produced by rubbing a gouty swelling with Sol. acet. Plumbi - the bark should be given in the intermission of the pain — this disease is to be treated as a Intermittent fever — there is a great tendency in the Constitution to periodical diseases and this should be attended to - in nearly all of these diseases, the bark is a remedy that may be depended upon —

Dr Barton Dec. 29th.

Pleurisy in the head — this arises from the same causes as those which produce Intermittents — the disease is ushered in with a chill — the bark is found to be a good medecine — Copious bleeding is injurious — tho' the pulse sometimes deceives us —

Cholera Morbus sometimes demand the Lancet — this sometimes occurs periodically — Dr Cleghorn found barks given during the intervals to be a very good remedy —

Dysentery — the barks in this disease is an old practice — Dr Mortan gave it when attended with fever — during the Apyrexia — this disease often is produced from the same causes as occasion Intermittent fever — Dr Cullen says the barks is improper in the first stage of this disease — I agree with him in this opinion —

Dropsy — in this disease, barks is sometimes useful — it is often accompanied with remittent or intermittent fever — In Hydrocephalus Internus the bark may be given frequently with great advantage — this disease assumes on many occasions the form of a remittent fever —

In the periodical headache of adults the bark is often very beneficial — When Dropsy comes either in Anasarca — Hydrocephalus or ascite, under the form of Typhus, I think the bark is an excellent medecine —

The connexion which often subsist between Dropsy and Jaundice, makes it necessary to speak of the latter disease — Jaundice in Veterans is often the effect of a torpor in the alimentary canal — here the bark may be useful as a Tonic — when Jaundice is accompanied with fever the bark may be advantageously used during an Intermission —

Phthisis Pulmonalis — in this disease the bark has been recommended — here I must observe that Phthisis is frequently attended with what Dr Cullen calls a Phlogistic Diathesis of the system this will be increased by bark — Bergius says he never knew the bark do harm in Phthisis — Van Swieten says the same — When Phthisis is attended with hectic, the bark may be good during the remission of the hectic — there is a Phthisis in marshy countries in which great quantities of mucus are thrown up destitute of pater — here says Murray the bark is a good remedy —

+ what an endless dispute of the word "good"

This disease is more common in the United States than has been imagined — the bark is injurious in tubercles of the lungs —

In Hemorrhages of red blood bark has been given hemorrhages should be considered as active* passive — the bark must be injurious in Hemoptysis which is an active hemorrhage — In passive hemorrhages the bark may be useful — in Menorrhagia Dr Cullen said it was good*, but I cannot agree with him —

Uterine Hemorrhages often depend on a lax state of the vessels of the Uterus — here the bark is an excellent medecine — the remote and exciting causes must be kept in view —

Bloody Urine — hemorrhages of red blood from the Bladder are more of the active kind than from the Kidneys — in lax states of the Kidneys, they often discharge blood, by which the urine is coloured; here bark is good* —

Scurvy — Dr Lind approved of bark in this disease — bark is celebrated as a dentrifice but it should not be combined with Cream Tart —

I am next to speak of fevers of the Exanthematous kind — in them the bark is certainly often good* — it has been used in the Eruptive fever of Small pox —

the bark may be given before the formation of pustules —

Measles — here bleeding is often necessary — the disease is frequently of an inflammatory kind — the hoarseness succeeding measles is worthy your attention — it sometimes requires bleeding — but often yields best to Bark, in combination with the Volat. Alkali & Opium —

January 1st 1830

Scarlatina is often compounded with Measles these diseases are not easily distinguished — In mild scarlatina without any affection of the throat and in many true cases of this disease, the bark is not necessary — Dr Withering writes well on this subject — I recommend his work to you — In the anginose cases, bark with wine whey has succeeded better than any thing else — Dr Huxham of Sancarter cure, —

Erysipelas — the bark has been used in this disease — Dr Cullen seems opposed to this practice — this disease appears under various forms — I have seen it very inflammatory cases & in these bleeding and blistering is necessary — this is true particularly in Erysipelas of the face &

head in women — here bark would have done harm —

Erysipelas in our city often appears in the form of debility — there are what some call putrid — here, there is a great tendency to Gangrene & the bark is necessary —

The English Physicians assert that 3i bark every two hours is the only remedy in Erysipelas — In London the disease is treated as a putrid one — In Scotland it is treated by a low diet & the antiphlogistic plan —

Pelletier says that Erysipelas is often of a ~~mal~~ malignant nature — he gave Decoct. Barks with opium &c — In this city I have seen bark after bleeding necessary —

I have once seen Erysipelas from puncture made by a lancet and introducing variolus matter, — the wound suppurated and raised it Erysipelas extended over the Thorax to the opposite arm —, it was cured by calomel — this disease is described only by Sauvages — the variolus matter was good, for the same matter in several persons had the desired effect — this was in 1793 —

I have seen one of the same kind produced by vaccine matter — the disease was not so violent —

Pemphigus or Vesicular Fever — I have seen

Dr Hall a great quizz. Cullen dont describe it at all

many cases of this disease in our city — it is light gen-
-erally, but sometime severe — it runs very high
in adults and requires bleeding and purging —
this disease is very uncommon at present —
I will mention the names of several patients
whom I attended — Mrs McFell — Mr Smith —
Rev. Mr Wiley's child &c — I refer you to Cullen
for a description of this disease — I do not believe
it to be a species of Erysipelas — the bark and acids
have been found good in this disease and especially
the bark. but this not till after bleeding & purging —
the face is most inflamed — vesicles arise as
large as the end of a persons finger — the neck is
first affected, then the face and sometime the
whole body — it often appears as tho' Cantharides
had been sprinkled over the body —

<u>Spasmodic & Convulsive</u> affections — in these
the bark has been much employed — as in Epilepsy —
this disease often depends on an organic affection
of the brain — here neither the bark nor any other
medicine that we know of, can do good — the
disease often depends on plethora & turgescence of
the blood vessels — here the bark does harm —
bleeding in this species is found useful — the blood
mostly gives the Inflammatory crust — Cullen
says he has not found bark good in this disease —
he found numerous tonics much better —

Mead used bark with Valerian in Epilepsy — verlhoff added to the bark a few drops of Oleum Cajeput — Dr Rush mentions a living had Epilepsy which he says he cured with large doses of bark —

Tetanus — of the use of bark in this disease, I have had no experience — I refer you to Dr Rush's papers on this subject — I believe the bark may be useful in this disease —— Tetanus has been produced by vegetable poisons — here the bark has been found good — Mineral Poisons often produce Tetanus — all narcotic vegetables and mineral poisons are stimulants and may produce Tetanus — here the barks is useful —

Dr Rush found the bark good in Tetanus & so have many other physicians — but in all these cases we ought not to ascribe the whole of the good effects ~~of the~~ which were produced, to the bark alone; there is always a considerable quantity of wine used along with the Bark — We frequently meet with a convulsive disease called Chorea Sancta Viti — this often depends on a peculiar mobility at certain periods of life — Cullen thinks the preparations of Copper too strong to be long continued, but he advises the bark & Chalybeates —

sometimes Bark is combined with Al. Cajeput — Dr Sydenham's ~~notion~~ mode of curing this disease is peculiar; he bleeds and then gives bitters — Bleeding has done good in some cases — Case related in which evacuant proved successful —

Pertussis — called Hooping or Chin-Cough — in this disease bark has been found good — but the proper time of administering it is not certain — Cullen says the bark may be given when the force of the contagion is gone and the disease is owing to debility — This disease has appeared to me to be complicated with Intermittent or Remitting fever — I have bled in this disease — The Hooping Cough was Epidemic at Gottingen and the bark was the most successful remedy — Monro used the bark combined with Castor — if our young patients could be prevailed upon to take the bark regularly in the intermissions it might be advantageous — but we are told that the bark in external applications may be serviceable in this disease —

Asthma — the paroxysms of this disease often seem to depend on plethora — here bark is very improper — but asthma sometimes depends on a peculiar mobility of the system — here bark is an excellent remedy — the par-

-ayyoms of Asthma are often periodical-
here, the bark giving during the intermission is
successful — the bark has been much recom-
-mended in Angina Pectoris — in this disease
Dr Smith recommends bark and the bitters in
London purging, the bark are resorted to —
this disease is often of gouty origin and here
the bark is not good — The bark has been advised
in Hysterical Diseases — in Hysteria so called it
is not used with advantage — bark combined
with opium has been used in Melancholia &
in Maniacal cases the bark has often done
good —

Gangrene — Mr Hunter has divided gangrene
into two kinds; with and without Inflammation —
Mr Hunter considers inflammation as increased
action in the part inflamed — in the treatment
of Gangrene, it has been common to attend to
the weakness, instead of the increased action —
I think bark is not good in preventing gan-
-grene accompanied with Inflammation —
here bloodletting is certainly the best remedy —
in a weak and languid action of the heart &
arteries in gangrene as in Typhus fever, bark
is certainly the best — here it may not be improper
to notice Abbe Fontana's Experiments —

Hartman's Work —

Bark used externally in Gangrene —
The bark has thus been found beneficial —
I know not who first used it in this way —
In the 17th century Helvetius gave bark in the form of Clyster in Intermittent — Dr Lind says bark used in Intermittent when used as a Glyster — some apply bark to the abdomen in the form of poultices made up with wine or water — This has been frequently used without any benefit — It has been recommended to quilt bark between cloths for children in fevers — Some have used it by sprinkling it on the linen of the bed clothes on going to bed — In infants under 2 years, Intermittent fevers have yielded to the bark shirt — The shirt must be taken off in the hot stage and worn during the cold stage — Dr Henry Jackson's Dissertation — He found that Yellow bark quilted in linen & applied round the wrist increased the frequency of his pulse, created fever & dryness in the palms of his hands — In many cases of venereal disease, mercury will not cure without bark — Bark cures Intermittents which would not yield to Mercury — Van Mieten relates a case where the patient was salivated for an Intermittent

fever and was afterwards cured by the Bark —
By suspending certain actions of the system by Mercury we often pave the way for the success of the Bark —
Bark often cures after Arsenic fails —
of all the articles of the Materia Medica none are more likely to be permanent, than the Bark when will you finish the bark, you weary a Load only 60 pages on the bark short indeed

Jany 2d 1810

A very important combination is formed of Peruvian Bark and Serpentaria - the powers of the Bark are thus increased - it seems well adapted in this way to Typhus, small pox the this combination is less allowable in Rheumatism -
It is often important to combine with the Bark Pern the powder of Valerian - Camphor added to the bark increases its powers in the Typhus of Fever -
Pulv. Sinapis has been added, 9ss to ℥ij of Bark with good effects - this is adapted to Intermittents tending to Typhus -
A more powerful medicine is made by adding to Peru Bark ℥ij, Cayenne pepper 9ss
I should suppose this adapted to Setanus —
Oleum Cajeput gtts ij is often added to ℥j Bark —

Unguentum
Quiet Bartholomew
of Barks, Gentian, Cloves Nutmeg
Spirit &c

this has been used in Pertussis - the Peru Bark has been combined with Castor - it is common to combine Opium with Bark - this is good in some Intermittents - In Typhus, Dr Lind used this combination - we have often to use Laudanum with Bark, to prevent the Patter from running off by stool - the Bark has been combined with Ex. Cicutae - of this I shall speak in the lecture on Cicuta -

The Volatile Alkali is often combined with Bark, especially in Typhus fever.

The tonic powers of Bark are increased by being combined with Iron, Copper &c -

Blue vitriol added to Bark frequently - Arsenic enables Bark to operate more successfully - we sometimes combine Bark with Cream - tart - I have never used this combination but it is much recommended

I have often combined Rhubarb with the Bark - the combination of Cream. tart with Bark is found useful in Dropsy -

I have often combined the Carbonate of Magnesia with Bark - I have used ℥j of the former to ℥iij of the latter - this combination has been found good in Dyspepsia - the Bark combined with Fixed Alkali has been used in Scrophulous affections -

Magnolia glauca – dose ℥i

— tripetala

— acuminata

— grandiflora

— auriculata

— Fraseri

d

× Prunus virginiana

Magnolia we have many species of this in our country - Magnolia glauca - tripetala - acuminata - grandiflora - auriculata - and Fraseri - it is a warm, bitter tonic, with some astringency - [℥j of the Bark powdered, in molasses was given 3 times in die in a case of Intermittent fever with success - it has been used in Peripneumonia notha - Pleurisy, Typhus - Rheumatism, Consumption &c its operation is somewhat similar to that of Gentian & Columbo - it often reduces the frequency and increases the fullness of the pulse - all the magnolias appear to have the same properties - The newly expanded flowers of magnolia glauca increased the paroxysm of fever - The bark in decoction proves gently cathartic

Liriodendron Tulipifera abounds in all the States - It is closely allied to the Magnolias - the bark is tonic and frequently used in Intermittents - Some think it little inferior to Peruvian Bark - I have never employed it —

× Cerasus or Wild Cherry tree is a durable tonic - anthelmintic undoubtedly - it has been used in Dyspepsia, Consumption, Lumbar Abscesses with hectic fever,

× nobody can read this — S.G.

+ This has been mistaken by some for Kalmia latifolia or Broad leaved laurel +

Salix pentandra and latifolia — alba —
— latifolia
— alba —

Aesculus Flava
Flava
— Hippocastanum —

the cherry is called by some Prunus Lauro-
-cerasus - a decoction of the Bark has cured
a violent tooth ache - it has been used in pow-
-der in Intermittents - the bark is bitter and as-
-tringent - a decoction of the bark is used in case
of worms -

Salix alba of Linnaeus a Willow tree - this
bark is little inferior to the oak in tanning, of
course it is astringent - it is highly antiseptic -
the bark and leaves have been recommended in
Gout, Scurvy &c - our medecine has been found
good in Intermittents, Dr Stone cured 56 persons
with this disease with the willow alone - Dr
Cullen speaks well of it - Stone used the bark
of branches 4 years old - Dr Waller says a decoct-
-ion of it has been used in Rickets

Aesculus Hippocastanum a Horse Chesnut -
we have two species in the United States Aesculus
Pavia and Flava -

Mahogany of the Bay of Honduras - called by
some Swietiana - this bark has cured Inter-
-mittents - it is inferior to the Bark as a Tonic -
the bark is called by some a Febrifuge - I have
used it in Intermittent fever

Cornus Sericea
Florida
Canadensis
Circinata

+ Rare a Red willow

+ this must be distinguished from
Spigelia & Seneka —

Serpentaria has fibrous roots —
the roots of Seneka are thick —

Cornus Florida or Dog wood - the recent bark is not as good as that which is older, because it is likely to puke - it is astringent and has long been used in Intermittent - The ripe fruit or berries infused in spirit or brandy make an agreable bitter - an infusion of the flowers has been recommended in flatulent colic - -

+ Cornus Sericea - this has been used in the American army - the bark is red within - it is little inferior to pale Peru. bark in Intermittent - There are other species of this plant as the Cornus canadensis — circinata &c. ——

Eupatorium Perfoliatum is used in Hepatic

Through wort — whatever that

+ Aristolochia Serpentaria or Virginia Snake Root - this is only found in America - it is one of the more stimulating bitter tonics - It is good in some fevers inflammatory after bleeding - the Spigelia Marylandica is to be attended to, it is probable that Virginia Snake root is similar to the Aristolochia rotunda - Aristolochia serpentaria is an aromatic bitter - it raises the pulse - Snake root is most safe of fevers when combined with Bark - Dr Wilson's Wash - Snake root is adapted to fevers which partake of Typhus -

Aristolochia longa is a bitter tonic
it has been used in Portland powder
in cure of Gout — the following is
the formula of this powder

℞ Aristolochia longa
Gentian top
Chamæ
Chamepetis
Centaury aa equal parts
Mix pulv — ʒj every morning in
glass of wine — for 6 months — after
this ʒss in same way for 6 mos — after
this ʒss every other morning —

+ Croton Eluteria —

0 aromatic, somewhat stimulant —

Angustura is stimulating, aromatic and bitter — dose 2 ℈ 3 times a day —

Jany 4th 1869

+ Cascarilla Bark — is said to be useful in Hemoptysis — I doubt this much — I think it hurtful — Dr Cullen places this among the tonics — I think it allied somewhat to Hypericum — ~~it is a native of Carolina~~ Arnica Montana or Leopard's bane is ~~a bitter~~ an aromatic bitter —

Angustura is a recent acquisition to the Materia Medica — with this medicine I shall close my history of the vegetable tonics — the name of this bark is said to be derived from the name of a place whence it was first obtained — it has been supposed to be the plant brought home by Dr Bruce — I proceed to take some notice of its use in diseases — the powder may be given in the dose of 20 grs every 3 hours — for adults — the Angustura is compounded with many other medicines — it is used in cases of Sporadic Dysentery and habitual Diarrhœa — the decoction of Angustura Bark in these diseases is said to answer better than the substance — it has been used in powder in Intermittent fever in dose of 15 or 20 grains — I do not believe it as good as the Peruvian Bark — Dr Pearson says it is inferior — in low irregular nervous fevers it is said to be better than the

bark because it agrees better with the Stomach — Brand used the decoction combined with some aromatic — ℥j in 24 hours — In the ulcerated sore throat, cynanche scarlatina, the Angustura bark has been found good used in Decoction — 8 gr of the Pale Angustura in Aqua Mentha has been used in Periodical headaches — Dr Pearson says the Angustura is excellent in diseases of the stomach — he considered it capable of producing the effects of any of the warm bitters as camomile — as a general truth it has been said that the Angustura is better than the Peruvian bark — this I do not believe —

In cases of Chlorosis* and obstruction the Angustura combined with Chalybeate has been found very good — some British Practitioners have used Angustura in Hooping Cough — it cannot be useful in all the stages of this disease — it is said not to allay the violence of the cough if emetics were not previously used — In some respects Angustura is preferable to the Peruvian Bark, as in some diseases of children — they take Angustura when they will not take Peruvian Bark — it agrees with them better and is not so likely to pass off by stool — it is on the whole a valuable medicine —

* What word is this

Crocus Martis is red oxide of Iron
Æthiops Martialis Black oxid of Iron

Flores Martiales made of Muri. Ammoniæ & oxide of Iron —
Tartarus Martiale Super Tart of Iron —

he ought to say, in my humble opinion — it is much more likely to be correct that any assertion of Dr Bu & his influence is 100 per cent to 1 compared with Dr P's

I have now finished my vegetable tonics & proceed to speak of Metallic medicine as Iron, Arsenic, Silver, &c —
I will not detain you with the Natural History of Iron - Iron is used in various forms - the preparations of Iron are as follows - 1 Iron in substance not dissolved by acids - as ~~the~~ Limatura Ferri - Ethiops Martialis, Crocus Martis - Rubigo or Carb. Ferri - 2 - Salts are reduced to the form of salts by acids - Sal Martis - Tartaris Martialis - Ferrum Tartarisatum - Flores Martiales - See Dispensatory 3 - those which are dissolved by acids, in a liquid form as Tinct Muriatis Ferri, this is the Tinct Martis of the Dispensatory - Vinum Chalybeatum dose of this is ℥ss in a day - Under this head if time would permit, I would speak of the Chalybeate Mineral Waters - these may be useful in many cases, but they are exaggerated in their virtues - persons who return from these springs, with health derive much benefit from the ride, change of air, diet &c - they are used so indiscriminately in all cases that I believe they do much harm - Dr Cullen's notions of the action of Iron on the System is incorrect - the general opinion of Physicians

it is not readily soluble in the Gastric

*of what use are such conjectures

is that Iron acts as a Stimulant & astringent - I think the term Tonic though ambiguous would be better - Iron is readily soluble in Gastric Juice - its effects in increasing the pulse are evident - I am pressed to speak of its use in diseases - as a tonic and medicine is not so well adapted to Intermittents as Peruvian Bark - but I believe that the preparations of Iron might be good in some cases of fever - the Rubigo Ferri with Pulvis Cinchonae might be good in Intermittents - but the Iron will probably never be much used in Intermittents - Iron as a tonic, tho' permanent, is slow in its action - In the inflammatory stage of Intermittents iron is very injurious - it is likewise hurtful in all diseases arising from Plethora - in flaccid habits the preparations of Iron are likely to do good - in depraved habits as Cullen calls them -

Fluor albus with fever is increased by the use of Tonics - but where it appears to depend on debility - I know from experience that our medicine is good -

In Gleet I have used preparations of Iron with manifest advantage - this disease is often a general affection and topical

applications as strong injections often do no good - here Iron with Columbo is useful - In Retentio Menses depending on debility and weakness of the Uterine Vessels the preparations of Iron are excellent - in such cases I have often used Iron with Ol. Salvice - of the last medecine I shall speak hereafter - in some cases of retentio menses, iron is injurious - In Chlorosis or Febris Alba there has been a contrariety among Physicians as to the use of iron - the preparations of Iron are well adapted to many cases of this disease -

what are we to do with the piece of Cattle Pr

January 5th 1810

The various preparations of Iron have been used in Hemorrhages - this is of ancient date - the astringency of iron is not considerable and cannot be much entitled to notice in hemorrhages - the preparations of Copper may be good - but there are cases where Iron may be used, as in hemorrhages depending on laxity of the Uterus - here they act as Tonics - there is much nicety necessary in the use of Iron - sometimes it proves injurious - some of the preparations of Iron have been used in hemorrhage from the kidneys - in these cases there is often no pain and the preparations of Iron may be useful - 60 gr of Opium & Rubigo Ferri same quantity mixed with flour & water is good in the Bloody urine of Cattle * - in pure active hemorrhages as Epistaxis, Iron proves injurious - the lancet is the best remedy - I have seen violent epistaxis in old age - it yielded to Lead - in Hemptysis, Iron is injurious - it is an active hemorrhage - I before rejected the Bark in this disease - Even in Pulmonary Consumption, Iron has been used with advantage, though not with entire success - in debility predisposing to Phthisis - I have used Carb Ferri with Creta - my experience of the use of Iron in Phthisis convinces me that it is good -

When is it good?

The Hemorrhois sometime depend on increased action of the Intestines - here Iron is injurious - but hemorrhois is sometime owing to debility and here Iron might be used - the preparations of Iron sometimes act as purgative - I cured a case with Rubigo Ferri 10 gr 2 or 3 times daily combined with a little Rhubarb = This was a constitutional disease -

In Dyspepsia, Iron has been much recommended - but in all cases it is not good - in treating of Mercury I will shew you that tonics are injurious - Iron is ill adapted to Dyspepsia of Plethoric persons - In this disease Iron is mostly combined with Gentian - In Pyrosis or Water Brash - Iron has been found useful, especially the Carb Ferri - it is mostly given with Kind -

The preparations of Iron have been used in Dropsical complaints - but in these cases depending on an excess of action, Iron is injurious - in the forming stage it may be useful - Dr Sydenham used it with Garlic - In certain obstructions of the Liver & Spleen, Iron has been used with success -

Iron has been advised as a remedy in Gout - it can never do good in regular inflammatory Gout - but in Chronic irregular gout Iron may be used with advantage - but can sometimes produce disagreable effects.

the preparations of Iron often determine Gout to vital parts — Several of the preparations of Iron have been used in the intervals of Asthma — the Carb. Ferri is the best — Dr Bree says Iron often cures this disease — in regard to the operation of Iron Dr Bree thinks it is owing to an accession of the oxygen to the system — Dr Bree says it must only be used in the intervals of asthma — and is not adapted to the asthma of Plethoric patients —

Cancer is a subject on which I always touch with hesitation, but I must inform you of the medecine used in this disease — the preparations of Iron have been used in this disease — the Carb. Ferri has been used, sprinkled on cancerous ulcers — Iron seems to have solicited the notice of surgeons in Cancer under the idea that this disease was an organized body — but Cancer is like worms an extraneous body — the British surgeons have lately prescribed Carb. Ferri in this disease and they say with success — In certain species of Cutaneous Eruption Dr Bree has used Iron with apparent success — the anthelmintic properties of Iron are considerable —

It is a general opinion that Iron exerts its effect on the Stomach and that its effects are thence communicated to other parts of the body — Iron has been detected in the urine of patients by a French Physician — but I never could perceive it in urine when the Iron had been long taken —

there was a man in the Pennsylvania Hospital who took 480 grs of Iron in ~~one~~ one day - it could not be detected in his urine - he used this quantity daily a long time - Dr White says that the Iron taken into the stomach never enters the Lacteals - but Dr Hodge of this University proved the fact more certainly - he proved that Iron does not ~~Iron~~ enter the blood vessels - but I must believe that Iron is sometimes received into the blood vessels by the lymphatic absorbents - vegetables certainly absorb Iron as I myself have proven by experiments - Dr Walmsley in his Manual Materia has proven that Iron is not absorbed except in a few cases - I do not think that Iron which is found in the blood is carried there by the absorbents, for Iron is found in vegetables raised in water only - Iron is found in the blood of every animal whether herbivorous or carnivorous - ~~a~~ many experiments should be made on this subject on different animals - some say that Iron is taken into the system along with our food - I admit that blood contains more Iron when the person has taken ferruginous medicines - but it does not follow hence that the Iron is absorbed -

Lime, silex, Iron &c are formed by the powers of vegetables from the fluids they take up, tho' no Iron be presented to them - for vegetables nourished solely in distilled water yield a quantity of Lime -

Dose of Aloes Martiales 5 to 6 grs
it is apt to vomit in larger doses —
Ferrum Tartarisatum dose 20 grs to ʒj

Jany 8th 1810

Dose of Iron — Dr Cullen says that this medecine fails often on account of the smallness of its dose — it is always best to begin with small doses of the saline preparations and gradually increase — Dr Cullen has found the stomach to bear Rubigo Ferri best — he begins with 5 grs for adults and gradually increases the dose — he has given ℥ i in die — he says that the stomach bears Iron better when joined with some aromatic — I have not been in the habit of prescribing Iron in large doses at first — I begin generally with 5 grs and seldom with more than 10 grs 3 or 4 times a day — I have given ℥ i in the Blind Hospital for several days without any injury — The Italian Physicians mostly employ the Limatura Ferri — I find it convenient to give Rubigo Ferri in combination with Cinnamon — it is a good and agreable medecine —

Copper — Dr Cullen places this among the astringent medecines — it would be better to class it with the Tonics — it is a stimulant tonic — this is proved by its curing many diseases depending on a loss of tone in the system — some preparations of Copper are found to prevent the paroxysms of fever — Dr Lewis says that copper is insoluble in the stomach, and its effects inconsiderable on the bodies of animals — Dr Duncan says that copper exerts no effects except mechanically — but I think this is incorrect —

Copper is soluble in the natural juices of the body — many facts prove this — The pernicious effects of copper in the system are many, as oppression at the breast, vertigo, delirium, deliquium animi, small weak pulse, convulsions, apoplexy, exanthematous eruptions, costiveness, purging with blood, colic — Such are the dreadful effects of copper — Nausea, vomiting and purging are often induced together —

People who work in Copper manufactories are as healthy as others, — but they are strict observers of the law, to wash the hands before eating — they give their bodies an ablution every week — Copper exerts its pernicious effect on other animals besides man — Dogs for example by licking copper vessels soon die — birds are not injured by it — fowls prefer water from a copper pan even if the water be colored green with the copper and are not injured thereby —

Copper as far as I know, has not been used in a metallic form as a medecine — it produces sometimes a salivating effect — a cent swallowed by a child produced a salivation in a few days — 4 lbs of saliva were discharged in 24 hours — the cent was afterwards discharged per anum and was not much dissolved — different preparations of copper are used —

<u>Aerugo Aeris</u> or <u>Verdigrise</u> is copper corroded by the vegetable acids — this is employed as an astringent,

In Gleet

℞ Aerugo aeris gr. viij - Ol. olivarum ℥vi. M. ft Injectio -

another formula

℞. Acet. cupri ℥i - Spt. Sal. Ammoniac ℥iv tere in mortare & strain and add Aquæ ℥x M. ft Injectio -

In Intermittent fever -

℞. super. sulph. cupri gr. IV - Ex. Cort. Peruv gr. xxxij - Syrup. q.s. to make pills xvi Signa 1 to be taken daily - if nausea came on add Ginger ℈i -

an escharotic — it is mostly applied externally — the turpentine has been used internally in malignant Ulcers of a venereal nature — I have never used it, but it is much recommended by others — turpentine enters into a pill which has been celebrated in Cancer — the external use is most common — it has been used as an injection in Gleets — the recipe used by some is ℞ — Aqua ℔ i gr. Ol. olivarum ℥iv this injection may be used safely — another formula is ℞ — Aqua ℔ i ℥i Spt. Sal. ammon. ℥iv rub them and strain and add Aqua ℥x — much weaker injections are better — Copper is an ancient medecine and was used by Hippocrates — Vitroleum Caruleum — this has been called sulph of Copper — but it is not — it is a super, sulph cupri — it is copper combined with an excess of acid — this medecine has been recommended in Intermittents — the dose is from gr 1/4 to gr 1 four times in die — Dr Adair gave it with other Emetics — when the Bark had failed in several cases this medecine has succeeded — he minced the Blue Vitriol with Canella alba made with syrup into pills — the following formula has been used ℞ Vitr. Coeleum gr iv — Ext — Cort Peruv gr xxxij — Syrup q s to make 16 pills — 1 pill to be taken daily — this is used in Intermittent Fever — it sometimes creates nausea, this is prevented by the addition of Ginger — In 1808 I prescribed the

Blue vitriol in Intermittents, combined with Ginger — it failed sometime, but often did good after the Bark and Arsenic had failed — If I do not mistake, this medicine is most successful when it induces nausea —

When I treat of Emetics, I will speak of the success of super sulph cupri in Consumptions with Hemoptysis — This medicine has been used in Uterine hemorrhages with advantage —

<u>Cuprum ammoniacum</u> — This is made by the following method ℞ Vitriolum Cerulcum ℥ij — Vol. Sal. ammoniac ℥iiij — rub them together until the effervescence ceases — then wrap it up & dry it on the top of a stone, and put it into a stoppered bottle — This has been recommended in <u>Epilepsies</u> and other convulsive affections — it is used in small doses — an adult gr ¼ in die & increase gradually — it is an active medicine — Dr Cullen speaks favorably of it — he has used 5 gr a day and has sometimes succeeded in <u>Epilepsy</u> — Dr Duncan has used it in Epilepsy and in some, without benefit, in other cases, with good effects — The Cuprum ammon. is certainly a stimulant — at first it creates nausea — but it should not be given when the stomach is empty — or else combine it with aromatics —

℞ Acet Cupri ℥j
Magnesiæ ℥j —

+ the solution is crystallized & the crystals being pressed, pour it into moulds —

In Dropsie this medicine has been given with advantage — Dr Willan recommends it — it has been used in that species of dropsy called Ascites — The Escharotic powers of the preparations of Copper have been long known — but since Mercury has become general, the use of Copper is much less attended to — I have used ~~with~~ Verdegrise combined with Ung. Basilicon, in Scrophulous and Venereal ulcers — I have used this ointment in the Dublin Hospital in old venereal ulcers — In Chancres, Verdegris has been found good; when they are foul, Caustics are necessary — Verdegrise may be used in powder, ointment or solution — the solution may be made by rubbing 2 grs in ℥j of water — this disposes the sore to heal — Copper has been applied to sores succeeding the use of Mercury — the Verdegris made into Ointment with Hogs Lard has been found useful in Lippitudo Capitis — this is a troublesome disease — in different affections of the eye, the preparations of Copper are often used — they act as astringents —

Silver — the preparation of Silver generally employed is Lunar Caustic, made by dissolving Silver in Lunar Caustic — this has been long employed as an Escharotic — I have used it in Venereal Ulcers in solution — In the application of it, I use a

* a great discovery — I wonder how long a camel's hair brush will last in lunar cavities!

* a queer way to make pills!!!

Camels hair brush - you can then lay it on any surface you please - to remove it, I use another brush with water - thus the patient suffers ~~pain~~ less pain than by the usual mode - This mode is certainly best in Chancre in the Urethra - it is certainly an improvement in the use of Lunar Caustic*.

Jany. 9th 1810

Silver - Argentum - Pilulae Lunares made by dissolving silver in dilute nitric acid and evaporating the solution till it shoots into crystals* - this has been used as a medicine - Mr Home speaks of ~~it~~ the solution of Lunar Caustic used in old obstinate ulcers - it stimulate granulation - the strength of the solution must be gradually increased - Ring-worm is sometimes cured by Mercury - the ungt. Citrinum is used in this disease - but when this has failed, the solution has been used with success - the Argent. Nitratum has been used in Epilepsy by Dr Irvine of London - it was used first in 1780 - dose 2 ½ or 3 grs 3 times a day - Dr Capp of London has published the result of this medicine in Epilepsy - It sometimes produces Diarrhoea - this article has not been much employed in the United States - Dr Jardine relates a case of

Of Gold — Aurum fulminans is a cathartic — oxide of Gold is used in epilepsy — it is made by depositing gold in aqua Regia and precipitating by pot ash — dose $\frac{1}{16}$th of gran —

Epilepsy cured with Argent Nitrat — or Lunar Caustic
I have employed this medecine in the Bloomd Hospital
it did little good, but occasioned purging —
Dr McGinn has given 12 gr of this in one day in
Epilepsy — this is a most distressing disease —
in Plethoric persons low diet and bleeding are
requisite — but the Same have been used without
vantage — When the powers of Nutrition are affected
in this disease little hope can be entertained
from tonics or any thing else — Our medecine
has been employed in cases of angina Pectoris a
disease of which we know little — I knew one
case cured by this medecine — Some have sup-
posed that silver is taken up by the Lacteals — I
cannot readily assent to this, but its effects are
rapidly conveyed to the Solids of the system —
The Nit Argent. is one of the most powerful an-
tiseptics — in 12000 time its weight of water it
will preserve meat (Dr Black says) forever —
Zincum — The Flowers of Zinc — Zinc when
raised by a strong heat will take fire and burn
with a white flame — this produces an oxyd of
Zinc — the flowers of Zinc have been used inter-
nally — it has been used in Epilepsy — Gaubius
ordered from 1 to 2 gr ter die — a woman with
convulsions, took 5 gr daily with success —

a Gentleman from the West Indies was cured of Epilepsy by Dr Rush – he used the Flore Zinci – Dr Donald Monro says he has given it largely without success – this medicine has been used in Hysteria – It is said that a person will bear Cupr Ammoniacum & Flore Zinci in grij mixed, better than grij of each separate – The flore Zinci were used in foul ulcers in the American army – The Salt formed by the union of Sulphuric Acid and Zinc is known commonly by the name of White Vitriol and Sulphate of Zinc – There are two varieties in use – the Sulphate & Super Sulphate – The sulphate is destitute of colour, transparent & has been mistaken for white vitriol – The Super Sulphate is white vitriol and is to be spoken of – it is more soluble in boiling than in cold water – it effloresces on exposure to the air – when exposed to a high temperature it parts with some of its acid – this medicine has been used as a tonic in disease – it enters the famous Cuprea draught – I have used the Super Sulph. Zinci combined with powder of Gentian or Columbo – 2 grs of the former with 8 of the latter, in Hysteria – it often induces nausea – this salt has been used to advantage in Epilepsy – I used it in the Penna Hospital with benefit – this medicine has been used in Bertusi – White vitriol does not produce all its good effects

In Pertussis -

℞ Super. sulph. zinci ℈j aqua ℥viij M ft. mist. sumat 2 or 3 tea spoonfuls for a child 4 years old -

In Cholera -

℞ Super sulph. zinci, sacch. saturni aa ℈ss aqua ℥viij M ft injectio -

Cathartic ℞ Sulph. Zinc
Sacch. Saturni aa gr. XV.
Aqua fontana ℥viij

in this disease by reason of its emetic quality — Dr Saunders says it lessens Inflammation of the Glottis — he does not use it with a view to produce vomiting — I think the powers of this medicine in Hooping Cough are independent of the emetic qualities of White vitriol — I give it in solution & on empty stomachs — at the same time I use the Pectoral mixture with it — the dose of White vitriol in this disease is not uniform — I dissolve 20 grs in Aqua ℥viij and a child 4 years old should take 2 or 3 teaspoonfuls in 24 hours — the puking occasioned is not dangerous and not to be dreaded — children take it easier than Ipecacuanha and Antimonials — This white vitriol has been used in Gleet — I use 5 grs & the same quantity of Sacch Sat. in aqua ℥viij — I know much stronger injections are used — In collyria for the eyes this medecine has been employed — 8 grs dissolved in ℥viij Aqua Rosæ — Acetate Zinci — this has been recommended as an eye wash — it is often used internally as an emetic in doses of from 5 to 10 grs — it is used in Gonorrhœa — 8 or 4 grs are dissolved in ℥vi of Water or Mucilage of Linnée seed or Barley water — Mr Fleury says this is much better than white vitriol and occasions less pain — some physicians have said that this injection is the best,

+ The white Oxide of Bismuth made by precipitation from the Nitric Solution of bismuth by means of the Potash dose 5 gr.

which can be used – I have not used the Acetat Zinci separately in Gonorrhœa – the following is the best method of preparing it – To a solution of White vitriol in 60 times its weight add a solution of Acet Plumbi in 2 or 3 times its weight of water – mix and filter – crystallize

Bismuth – I have little to say of this medicine – this is a metallic body resembling Zinc – it has been employed in practice – in Geneva this medicine is employed in disorders of the stomach – 4 gr in 24 hours – The Magistery of Bismuth is made by dissolving it in the nitric acid –

Arsenic – I proceed to speak of this medicine – this is a semi-metal – Arsenic is found native – it is easily known when it has the metallic appearance – Arsenic is sometime found as an Oxyd – and is distinguishable by its garlic smell when burnt – it is the most volatile of all substances – it is a most violent poison to all animals – this differs from all other poisons – it is the universal poison – Arsenic in its natural state is never used in medicine – Dr Fowler's solution is made by boiling 64 gr of Carb Potass & 64 gr of white oxide of Arsenic in 3 of water and when cold add as much water as will make 3 ℥ 16 water

1813

Dr Darwin used a Saturated Solution of arsenic by boiling and then filtrating — dose 10 drops

I have used arsenic in form of pills in Inter-
-mittent fevers - each pill contains $\frac{1}{16}$ gr of
Pulv arsenici and $\frac{1}{4}$ gr of Opium - this is
for an adult - it shows an obvious effect on
the system - in the management of an Inter-
-mittent, I have given 3 such pills in 24 hours -
I would recommend this formula to your notice -
it is better in substance, than in solution, as
Fowler's - I have proven this by experience -
Patient take arsenic in substance with
reluctance, they know it, smell and the drop
dose is very uncertain - but few know that
we give it in the form of pills - I was led to
use Opium with arsenic on account of the
good effect which opium produces when
joined with ~~arsenic~~ Sacch. Saturni - I
have seldom seen inconvenience from this
medecine - arsenic sometimes affects the
bowels - this is prevented by ~~disease~~ adding
opium —

January 11th 1810

Arsenic - is inert in its metallic state on the system -
I have known an Intermittent cured by gr 1 of this mineral -
but sometimes 3 grs are necessary tho' I do not recollect of
giving further - Arsenic sometimes fails in Intermittent
Dr Donald Monro did not find it very beneficial - Dr
Fowler has given an account of 12 patients where the arsenic alone failed -
when in solution —

Dr Pearson long
ago found 1/16 grn
of arsenic at a dose a
remedy for ague —

I have exhibited the arsenic without seeing it produce much benefit - my failure I ascribed to the tendency of the Intermittent at that time, to Typhus - some aromatic is to be combined with it in this case - In autumn 1808 I gave the arsenic without much good, and succeeded afterwards in the same persons with Blue vitriol - Writers differ respecting the time of giving this medecine - I think it should be used as the Bark is, that is during an Apyrexia - Arsenic being powerful and dangerous as a medecine, its effects in Intermittent soon appears - (lead I told you was good in Hemorrhage) - If these effects are not soon evident, I omit their use - if arsenic when given to 2 grains do not succeed, I lay it aside - Dr Fowler relates cases of Intermittent of 5 months standing cured by his mineral solution 10 drops 3 times a day, in 8 days - Although I have placed arsenic among tonics, yet I do not believe that its effects in Intermittent solely depend on its tonic power - arsenic weakens the patient and nauseates his stomach - after the patient is freed from his fever, he is left languid and affected with a Dropsy, or at least an edematous swelling - this swelling affects the face, hands and feet - this swelling never appears until the disease is destroyed - arsenic produces the opposite effect of tonics - it produces a dropsy which I call Adema arsenicalis - the arsenic lessens the contractility of the cellular membrane, tonics increase it - I do not assert that arsenic never cures intermittents without this Adema, but the swelling is generally induced - I never knew an Intermittent in an adult cured by arsenic

without accasioning this oedema. I believe any medecine may be so managed as to produce a Tonic effect and I do say that arsenic may be so given as to act as a Tonic - I saw two patients last summer whose appetites were increased by the arsenic - Dr Darwin says that arsenic produces its good effect in Intermittents by stimulating the stomach to greater action, which by its association with the heart and arteries produces its effects. I do not think this - I do

When the dose of arsenic makes the person sick and obliges him to lay down, I have always found the medecine to succeed - some persons have given arsenic with the view to its emetic effect - this medecine is safe for children as adults - it cures when Bark fails. in these cases there is generally an excess of arterial action - hence arsenic is better for vernal than autumnal Intermittents - When it is unequal to the cure of Intermittents it paves the better way for the bark - when both medecines have failed, the system is at least prepared the better for the use of Mercury - arsenic is not adapted to all Intermittents of long standing - arsenic is most safe in substance and joined with opium - as it is dangerous it should be administered with the greatest caution and attention to the patient -

* All the advocates of Arsenic as a medicine acknowledge its deleterious effects — why then use it?

January 12th 1810

Arsenic* being so very deleterious that some have said it lays the foundation of incurable diseases. The adema produced by it is incurable by medecine but it cures itself spontaneously — Arsenic is said sometimes to lay the foundation of consumption — this I believe is true in some cases — I have not known the arsenic in my practice do any great injury to the system and I have prescribed it daily and to various constitutions — Before the spring of 1804 I knew not that arsenic was used in Pulmonary Consumption — in that year a young lady with that disease applied to me — she had Intermittent fever with Consumption — I gave her this medecine & greatly relieved her — she caught cold and relapsed but the arsenic restored her — she again relapsed from catching cold and at last died — Arsenic has cured Hectic fever — In the course of last summer I was called to see a lady with chills, cough, fever & I conceived the disease incipient Phthisis — here I might have used Cinchona — but I used Fowlers Solution and cured her — she took in all ℥ss of this medecine — From the great affinity of Rheumatism to Intermittents, the arsenic may be useful in that disease — I have used preparations of arsenic in this disease with good effects — it always produced considerable Adema — I believe that arsenic is good in Intermittent Rheumatism — I should suppose it better adapted to acute than Chronic cases —

arsenic has been used in Grant — in the Spotted Fever of Eastern States —

Arsenic has been recommended in Hemorrhage — It has been employed in obstructions of the Liver and Spleen — it is probable it operates somewhat like Mercury in these diseases — it does not operate as a tonic — Arsenic has not as I know been used in Hepatitis — Dr Darwin relates a case of palpitation of the Heart cured by arsenic — it was accompanied by Intermittent — by giving his saturated solution of arsenic he cured the patient — I told you that Nit agent was used in Angina Pectoris — Arsenic has been employed with benefit in this disease — cases of cure are related — Arsenic may be useful in Epilepsy but I know not that it has been much employed in this disease — Arsenic has been good in cases of worms and convulsions occasioned thereby — I do not know much of its anthelmintic power — of the use of arsenic in Cancer I know very little — the use of arsenic in cancer is not new — it was used at the beginning of last century — various powders have been employed in cancer into which the arsenic entered — Arsenic has been given internally in Cancer — it is said to lessen the pain of the sore & dispose it to heal — I have very little experience of the use of arsenic in this disease — In cancers of the Womb, arsenic has been topically employed — decoction of carrot & hemlock has been injected into the Womb —

2 ℥ ana

+ boil ~~equal~~ parts of acids of arsenic & crean
of ~~tra~~ tartar in the water - filter & crystal
-lize to liquor

In scrophulous swellings of the neck in children, arsenic has done some good – but I had to desist after a while – in open ulcers of the scrophulous glands arsenic has done good – it is a powerful suppurative medecine given internally – arsenic externally or internally is good in ulcers succeeding Buboes – these often refuse to yield to Mercury – the disease is attended with pain & we are compelled to use opium – arsenic here has been used with benefit, internally and a wash of arsenic also applied – In all cutaneous affections the arsenic has been employed with much good – but its use is often very hazardous and imprudently used has occasioned apoplexy – I beg of you to guard against improper uses of this medecine – the greatest caution is necessary – I am authorized to say that Dr Cathrall gave 3 gr of arsenic in one day in a case of Intermittent fever – but such large doses are injudicious – The arsenicum tartarisatum made of white arsenic and Chem. tart. in certain proportions is a medecine which is sometime used – some Physicians think it entitled to attention – but I know nothing of it by experience – There is great caution necessary in examination of dead bodies supposed to be destroyed by arsenic – I advise you to read Dr Blacks Chemistry on this subject – it is a common notion that the smell of garlic is always sufficient to detect the presence of arsenic in dead bodies – it is a most fallacious test indeed and not be depended on –

dose from ℥ss to ℥j of powdered tin
it acts mechanically – because the impalpable
powder is not so good as the coarser

In Singultus
℞ Sulph acid ten. ℥j – aquæ mentheæ ℥j – M.

* every thing in nature is used in Hemorrhage by Dr.

January 15th 1810

Stannum or Tin – I shall say nothing of this till I come to anthelmintics – its tonic properties deserve very little notice –

Sulphuric acid – this a tonic – of the medical chemical compound I shall hereafter speak – In the form of Elixir of Vitriol it has been much used by practitioners – some of the effects of this acid show it to be a tonic – Sulphuric acid seems adapted to cases of debility in which we use the vegetable tonics – we often combine Bark with Elixir Vitriol – Sulphuric acid has been used in Epilepsy – in certain other spasmodic affections this acid has been found useful – Dr Duncan used in Impetigo Sulph acid tenui ℥j. aqua mentha ℥j – . the Elixir Vitriol has been found good in Fluor albus – I have used it myself – Diluted Sulphuric acid has been used in Hemorhages of red Blood – in Uterine Hemorhages – in profuse Catamenia – Sulphuric acid has been combined with Opium in Hemorhages – this Sulph acid given internally has been found good in Itch in the Edinburgh Infirmary – Sulph acid combined with Lard is used in Rheumatism ℞ Sulph. acid ℥i – Hogs Lard ℥i – ℞ this is all I say of the Sulph acid –

Muriatic acid has been found good in Dyspepsia — x drops in water 3 times in die — as a Tonic I believe it better than Sulphuric Acid — some of the Physicians of Baltimore have used this acid in Jaundice — This acid as a Gargle has been praised as a remedy for sore throat — I have no more to say of this acid now —

Muriate of Soda is a powerful Tonic — as it is universally used, it is less employed as a medecine — The inhabitants of Iceland do not use Salt — The Indians before the discovery of America used Salt — In low Typhus fever salt has been found very useful — Salt has been found to check the flow of blood in Hemoptysis — Salt has been accused of laying the foundation of Calculus in the bladder but I do not think it probable — Salt has been used as an Antilithic in Europe — I have used Muriatic acid for this purpose — Salt has been charged with injuring the teeth — it is likely that the intemperate use of Salt may injure the teeth — the Laplanders have good teeth though they use great quantities of Salt — Salt is said to be poisonous to many Carnivorous animals —

I believe that the atmosphere at Long Branch & such places is injurious to patients with Pulmonary Consumption — Dr Smith of New Hampshire is of opinion that the prevalence of Bronchocele in Southern Countries is owing to the saline state of the air — but on this I cannot agree with him —

+ equally soluble in cold as hot water —

Lime - deprived of Carbonic Acid is soluble in Aqua - when taken internally it acts with a tonic or astringent power - the Aqua Calcis has been good in weak digestion - a wine glass full with as much milk or water may be taken 3 or 4 times in die - it agrees with the Stomach - Its tonic powers are evident in allaying vomitings - I have used it with success in allaying Arthritic Vomitings - you have been told that lime has arrested the black vomiting - I knew one case of black vomiting cured by White wash given in mistake for Aqua Calcis which I had ordered - in Chronic Diarrhœa - Aqua Calcis and Milk has been found useful - Injections of Aqua Calcis with Mucilage of Gum Arabic have been used in Gonorrhœa - it is best adapted to chronic cases, where there is little inflammation - Aqua Calcis as a wash has been found good in Old Ulcers - In a future lecture I shall speak of Aqua Phagedenica - Aqua Calcis has been used in Burns, mixed with Oleum Olivarum -

Muriate of Lime as a Tonic is better than Lime itself - its taste is bitter and pungent - it has been used in Scrophula of every kind - it is always necessary to begin with 3 or X drops two or 3 times in die, in water - I am sure I have used this medicine in Scrophula with success - I have used it in open Scrophulous ulcers - Dr Griffiths says he has found it more useful in occult Scrophula - I have used this medicine in Bronchocele or Goitre - the dose must be regulated with its manner of agreeing with the stomach - the last article which I mention in this Lecture is the

Nitric acid in tonic
has been used in Syphilis & Hepatitis
but Mercury is far preferable.
℥i to Aqua ℥viij as a
gargle is used sometimes —
~~It has seemed to cure (but is Mercurial)~~
~~has seemed cure~~

Muriate of Baryte – the taste of it is pungent – it is poisonous in a large dose – it has been used in Scrophula and hectic fever – its dose is 5 drops at first – in too large doses it accasions sickness, vertigo &c – In Cancer it has done much good – it has been used in old ulcers of the legs – The scrophula of negroes is different from that of whites – in them cases the muriate of Lime has been found useful – this medicine has been said to be good in the venereal disease –

End of Tonics –

Ether
Strong drink
vol alk.
Musk
Opium

Bartons list

January 10th 1810

Incitantia a stimulant — synonymous terms — I shall include in this, those articles which are more stimulant than any we have yet mentioned — Volatile alkali: this is an important medecine & almost indispensable — in placing this higher than opium I differ as you see from Dr Brown — I would place Ether at the head of the list, 2 Strong drink, 3 Vol. alkali, 4 musk 5th Opium — this is quite contrary to Brown's list — but as there are other stimulants I will not follow this plan — I am for forming a complete history of this medecine — its stimulating quality is manifest to all — Dr Cullen calls it Antispasmodic — I do not retain such a class — the Volatile alkali has been used in cases of Intermittent fever — it has been used before the paroxysm — and is mostly used combined with Opium — this medecine combined with Bark may be useful in Typhus Fever — the Volatile alkali is much used in Jail & Hospital fevers which are of the Typhus kind — this medecine has done harm by being used indiscriminately — it is improper in the first stage of Typhus — but in the 2d stage where debility is present, this medecine may be used — Sir Pro Pringle says it is used properly in the third stage of Typhus — writers have not said much respecting the time proper for giving this medecine — in the exhibition of vol. alkali &c you should choose ~~[illegible]~~ a period of apyrexia —

+ Wine-Whey is made as follows

Put a quart of milk in a convenient vessel and let it boil, then add a gill of white or sherry wine - or if + gill is not sufficient to separate the curd add more - let it stand a few minutes, till the curd begins to separate - then lay a muslin rag or piece of fine gauze over another vessel and pour the whole on this in order to filter gradually — the filtered liquor is transparent and is the wine whey which is to be made palatable as may be required —

The vol. alk combined with Bark & valerian has been given in cases of Periodical headach — I do not think our medecine adapted to Consumption — but I have found it good in some cases of Pneumonia disposing to Typhus — this occurs in marshy countries — this disease has always been increased by depletion — after bleeding in Pneumonia has been used & the pulse is soft, the vol. alk. is very useful, some whey, opiates, blisters &c — in this case the alkali is good by its stimulating and expectorant qualities — this article is adapted to some cases of Puerperal Fever — when it assumes the shape of Typhus — it is a common disease — in declining stage of Pulm-Consumption when cough is urgent and debility great and we use cordials, the volatile alkali is very important — it produces remarkable effect on the tongue — its colour is changed — in that obstinate hoarseness succeeding measles, the vol. alk is one of the best remedies — I used the watery solution of Carb. Ammonia with Gum Arabic and Sugar — I believe I first used this — this medecine has been used in Pertussis — it has been used in Pyrosis. it acts by neutralizing acid in the stomach — it has been employed in Dyssentery — the vol. alkali is peculiarly suited to Dyssentery with Typhus — this alkali is adapted to many cases of Chronic Diarrhea such as occur in hot climates — I never employed volatile alkali in Colica Pictonum but I think it may be good —

Eau de luce is vol alkali
and ol amber —

℞ Lyphus —

℞ Carb ammonie ℥i — G. arabic ℥i Saccharum album ℥ij —
aqua ℥viij — Haft Mistura —

The Alkali has been used in Rheumatism — it is best in Chronic case — some combine gum guiacum with it — I have used the watery solution of Carb. Ammonia and have given 60 gs in 24 hours — I have given ℥ß in a day — a dose for a day under ℥ß is small — In cases of irregular Gout where we employ Opium the Volatile Alkali may be very useful — Dr Thomson has used this alkali with more success than opium — our medecine in the form of Vol Tinct Guiacum, the simple water & the pill have been found good in Dropsy — Dr Sydenham deemed the Alkali an excellent remedy in convulsions from dentition — I have never used it — many writers have considered the Vol. Alkali as a remedy for the bite of the Viper — the Vol Alk in the form of Eau de Luce has been called a specific in the bite of the Viper — Dr Fontana did not find the Alkali of any use in this disease — it increased the violence of it — he says it is useless in this disease and often exaggerates it — the Vipers bite does not always prove fatal as I have proven by experiments — animals have recovered from it without the aid of medecine —

The Volatile Alkali is used in Ulcers externally & internally — 1st externally — cancers are said to have been cured with Vol. Alk — Scrophulous Cancers have been treated with this medecine — this Alkali is often used in the form of pills made up with Carb Rosar — and Carb. Ammonia — my favorite formula is by the following — ℞ Carb Ammoni ℥j & Carbon ℥j Sugar ℥ij — Aqua ℥viij Fa ft Mistura —

Opium — this is the produce of the Papaver Somniferum — its mode of preparation is detailed in different Books — we seldom receive it pure — it is often adulterated with impurities — tautology

Dioscorides 800 years ago obtained the Substance called Meconium by boiling Poppy heads and inspissating — he obtained opium by inspissating the juice procured by incisions in the Poppy — the incisions are made at night and the juice collected in morn —

Mr Carr says the best mode of cultivating poppy is by planting the seeds 6 inches apart in quadrangular areas of ground — when it comes up and is 6 inches high lay over the ground, dung — water continually till the pods form — then make your incisions at night and collect the juice in morn — make your incisions until 6 a 8 are made — then suffer the poppy to go to seed

Narcotica

Papaveràceæ — January 19th 1810

Opium — when opium is applied to the eye urethra, nose or any part devoid of cuticle it produces pain, heat and inflammation and diminishes the sensibility of the part — a simple solution has been used in Gonorrhœa

Laudanum applied externally to the stomach and bowels has induced sleep, when it would not when taken internally — Dr Cullen says it may be applied in this way — Opium applied to one part relieves pain in another — an opium plaster applied to the temple has cured tooth ache — opium may be used in form of a poultice

Spt of Wine extracts more of the powers of opium than any thing else — Dr Ward says opium acts as a sedative externally more than internally — he says it is absorbed when externally applied — I think that opium externally applied is apt to produce considerable effects — Mr Rittenhouse had a violent pain in the breast for 30 years and nothing relieved it but laudanum externally applied — it always produced costiveness — the laudanum gave relief in one hour — when the cuticle is removed the effects of opium externally applied are as unequivocal as when taken internally — it has produced drowsiness and death — Stramonium acts in a similar way and it may be called, a first cousin of opium — it does much harm and is used in dreaming bitters — In what manner does opium act?

I believe it acts in most cases independent of any absorption, externally — the bodies, of frogs, lizards &c do absorb many substances — in many fishes the lymphatics do open on the skin — of Opium when taken internally — in the vital functions; it renders the pulse quick and more frequent & the heat is increased, afterwards the pulse sinks — the respiration is little affected except large doses be taken — when taken in very large doses, it kills. Physicians differ as to the operation of opium — it is an old opinion that opium is a stimulant to the system — many writers before the time of Dr Brown held the doctrine of the stimulant effect of Opium — Dr Crumpe's Experiments — — — From experience I must say that the primary effects of Opium are to render the pulse more full and frequent —

This medecine augments the heat of the body — I have taken a great deal of opium and it has always produced flushing of the face and heat in the palms of my hand — I have seen obtuseness of hearing produced by taking large doses of Opium — and I have seen small doses do the same thing — this shews the vast power of opium and proves its stimulant powers — it produces a turgescence of blood in the brain — the Respiration is but little affected with small doses — I proceed to speak of the effects of Opium on the "Natural Functions" — it diminishes the appetite when taken in large doses — Dr Crump says it diminishes secretion in all parts except of perspiration — but I think it does not lessen the secretion of bile — Opium has been used to allay the cravings of hunger in time of famine — Opium certainly impairs digestion and induces vomiting in many cases — one grain of good opium will do this in persons not accustomed to take it — Opium lessens the Intestinal Evacuation, and induces costiveness — but in some cases this will not take place, as in torpor of the intestines — it has proved laxative in Colica Pictonum — very large doses often prove considerably purgative — I have seen this in Catalepsis — Opium is remarkable for producing a discharge of Flatus — this is universal — Is Opium a Diuretic? On this subject Physicians differ — it has been used in Abdominal Dropsy — I know it is frequently diuretic — Dr Haller said that in him opium lessened the discharge of urine &c — in some persons opium produces an increased flow of Saliva —

but I never saw the latter effect produced —
Opium has been said to be an Expectorant — I have observed this myself —
The Perspiration is always increased by the use of Opium — this takes place after the pulse rises — it produces an Itching on the Skin — this may be prevented by taking a bowl of Camomile tea — In some persons the use of Opium has produced disagreable eruptions & boils on the Skin — this was the case in the wife of Judge Smith of Trenton — the effect of Opium on the 'Animal Functions' — it always produces hilarity and sprightliness — it increases the venereal desire in all animals — and produces erection of the penis — after hilarity and delirium of mind have rapidly, dullness follows and sleep — diminution of muscular motion vertigo, tremors &c &c — Dr Crump says it produces convulsions, but I do not agree with him in this respect — the effects of Opium on young children are very remarkable — it produces wonderful hilarity of mind —

Dr Tiedlen once thought Opium Stimulant but Dr Bard convinced him that it was a Sedative — he was wrong —

January 23 1840

There are persons who have taken ℥x Opium in one day — When a Persian gets in a fit of anger he takes a piece of Opium as big as his thumb and then drinks a quantity of Vinegar — this produces extravagant laughter and finally death — There is no doubt that Opium produces the same stimulating effects as wine, brandy &c — They exert similar effects on animals — a woman took 36 grs of Opium & in eleven hours died — on opening her the stomach was much inflamed & corroded — the intestines were violently inflamed & there were in them some gangrenous spots — nothing extraordinary appeared in the brain — I have now finished the subject of the Natural History of Opium — I would say a little of the Chemical properties of this medecine, but analysis at different times has found different results — it is somewhat bitter and astringent — the former resides in the gum the latter in the resin — there is a small quantity of feculent matter — the narcotic quality chiefly resides in the Resin — Of the use of Opium in Intermittent Fevers — this is by no means a new practice — Opium appears to be a good preparative for the Bark — Opium has been given an hour before an expected paroxysm with the effect of preventing it — I have seen this medecine increase delirium and fever even when given before the hot stage — when there is a determination to the brain, I do not think that Opium can be given with safety — Dr Stock says that opium lengthens the paroxysms and produces costiveness —

In the hot climates it is probable that opium in the hot stage may not be injurious because there is a great determination to the skin — this as I told is the case with the Bark — Laudanum with a cup of coffee given about the time of an expected paroxysm is a very good remedy in many cases — the narcotic qualities of the opium are diminished, but its stimulant qualities increased by combination with coffee — Dover powder has been much used, given an hour before the expected paroxysm — I have not made many trials of this medecine — I have never exhibited opium with the view of preventing the paroxysms of lethargic Intermittent — opium is often combined with Bark. it is said that when opium is added to Bark, it takes less of the last medecine to cure an Intermittent — I think this combination very proper in those fevers which tend to Typhus —

Hemicrania is often an arthritic affection and opium is one of the best remedies — in many cases this disease is induced by Intermittents — it may often be properly called an Intermittent Hemicrania —

Of the use of Opium in Continued Fevers — Synochus which is an Autumnal Remittent, & Typhus are in the commencement diseases of high excitement. In the beginning of these fevers, I believe Opium is injurious, especially when given as largely as Dr Brown directs — In all continued fevers, the cause is some stimulating agent — Plague and Yellow Fever are varieties of the same species — delirium is a symptom of these fevers and is best relieved by the Lancet — but there are some cases in which delirium is best relieved by the use of Opium — Dr Sydenham says the opium should not be given until the 12th day of the fever — But I think that if on the 3d day after having used evacuating medecines, if there be little fever, the opium may be used — Dr Campbell in his treatise on Low Typhus Fevers says that Opium produced great effects — and where opium was not taken, the patient was troubled with delirium, wakefulness &c — Opium combined with Camphor when used in Typhus produces a great determination to the Skin ℞ opium gr 1½ Camphor gr XV M f Boluss was used — and if the symptoms were violent 20 or 25 drops of Landanum were used into a few ℥ of Julep of Camphor of which I am to speak — Opium is often good in preventing the want of sleep preceding delirium — In delirium tending to Mania Opium has been found good — In the tremors & subsultus tendinum of fevers, Opium has been used with advantage — Diarrhoea is often a symptom of

many fevers, especially Typhus — here Opium is good, but I would not wish you to keep the bowels in a costive state — I have had frequent opportunities of seeing the good effects of Opium in Typhus fever — it raises the sinking pulse and removes more than any other medicine the delirium of declining Typhus and leaves the system much in-vigorated — Opium is a medicine whose powers soon wear away — but this should be prevented if possible and the number & quantity of the doses should be increased — I have often found this very necessary — you all know that opium acts powerfully in producing sweat — on this account I have often been obliged to desist from the use of the medicine, tho' sometimes a slight diaphoresis is very desirable — you have heard much of the use of Opium in Yellow fever — but I think it is not entitled to great credit in this disease — It has been found to increase the delirium, the pain in the back and often failed in preventing vomiting & produced great costiveness — the affection of the liver was increased by the use of Opium — gr 1 produced this effect in many cases — In convalescence from Yellow fever I found opium to be very disagreable to patients — I do not assert that opium was never of use in Yellow fever — I have practised in this fever as much as any Physician except 2 or 3 and I have seen but few cases in which opium was admissible — in the Plague Opium may be useful, but I know little from experience —

Of the use of Opium, in Inflammatory Diseases, also of its Abuse

In inflammation of the eyes, such as attacks fine girls, lead water is used - Brandy in water is better - In cases of Jaundice a gall stone often gives great pain in its passage; here Opium allays the pain & facilitates the passage of the stone - Bleeding is also used in this disease - Opium is often used in the Suppurative State of Inflammation - it is said to allay the pain & promote suppuration - Pneumonic affections have been cured by V.S. blisters, low diet & and Opium perhaps would inquire in the forming stage - but De Ucen says Opium combined with diaforetics may be used in the commencement of the disease - Opium is certainly useful after the Inflammation is abated - In Pneumonia a repetition of bleeding is necessary - in the latter stage Opium combined with mucilaginous matters is an excellent medecine - Cullen says that when the difficulty of breathing is lessened Opium may be used - In the Peripneumonia Notha of old people, Opium is dangerous - blisters &c are much better - I have bled a man aged 75 in this disease 16 times with success - In Catarrhal affections, in the beginning V.S is the best remedy - but when the inflammatory symptoms are removed, Opium is a good and the only remedy - but it is best used combined with some Antimonial to create a Diaphoresis - There is one particular preparation of Opium I will mention - it is the Mucilaginous Mixture

In Cough.

℞. R Opii Camphorata ʒi. Vin. antimonii gtt. c. G. arabic ʒi.
Succ. Glycirrhiza ʒi aqua bullientis ℥viij. M. ft. Mistura.
Signa ℥ss occasionally when cough is troublesome —

Elixir Paregoric

℞ Gum Opii
Flores Benzoin ãã ʒi
Gum Camphor ʒi
Opt Vini ℔ij — digest for 3 days —
near 2 grs of Opium in ʒi —

Dovers Powder

℞ Ipecacuanha
G. Opii ãã ʒi
Sulph Potas. ʒi —
~~Opt~~ dose X grs —

℞ Tinct. Opii ℥j Vini Antim C. gtts G. Arabi ~~℥ss~~ ℥j. Ex Glycerin ℥j Aqua bullient ℥ viij. Misce fiat Mistura dose ℥ss occasionally — it relieves though directly —

* or Tinct. Paregoricum — There are some inconveniences in this medecine — some people get attached to it on account of the Brandy it contains. this formula is not universal for where there is sweating the Vin Antim should be omitted. —

~~To m~~ I make Elixir Paregoric by taking G Opii Gluer Benzoi aa ℥j G Vin Camphor ℥j Spt. vini ~~thij~~ — to digest for 3 days — this differs from the formula of the Dispensatory but I know from experience that is the best method of preparing the medecine —

look at page 325

Wine Whey

Boil a quart of milk — when boiling add 1 or 2 gills of good old wine — let it stand a few minutes till the curd begins to separate — then lay a muslin rag or gauze on a bowl & pour on and filter gradually — the filtered liquor must be made agreable with nutmeg &c. —

See Look at bottom of page 323 —

Lind says Opium was very necessary in Dysentery —
In my practice I have cured opium in every case of this disease that has came under my notice — the astringency of Opium is so little that it cannot injure — I know that it may be given in some cases in the commencement of Dysentery — this disease often depends on irritation and here opium is the only remedy — I have mostly combined it with Ipecacuanha, nearly in the form of Dover's powder — In this disease opium is useful in form of Injection —
In a great majority of cases of Diarrhœa we use Opium —
Cholera is a disease in which opium is absolutely useful — I have known a few drops of Laudanum save the life of a patient in this disease — Nature does sometimes cure Cholera, but very rarely — in violent cases 3 or 4 grs of Opium may be given in 24 hours — of the use of Opium in Tetanus, I know but little from experience — Physicians differ much in the treatment of this disease — 20 ℥ of Laudanum have been given in 24 hours in this disease — in another case a negro took 1700 grs of Opium in 17 days, in Tetanus and got well — I Mosely reposes little confidence in Opium in this disease — Opium has been applied externally in Tetanus with great advantage — If Opium will cure Tetanus it must be in large doses as 20 grs in a day — In Hydrophobia Opium has been used — the causes of Hydrophobia are certainly of a stimulating nature — all the cases I have seen, terminated in death — this is a most In-flammatory disease — Boerhaave says it must be treated ex vis issue and deliquium — I have seen Hydrophobia from Hysteria it was cured by Assafœtida —

The only thing I ever knew to occasion a patient to take water was Tobacco — Chorea Sancti Viti has been treated with Opium — Authors differ as to the use of Opium in Epilepsy. This disease has been produced by simple debility — but these cases are extremely rare — the disease generally depends on organic affection of the Brain — Epilepsy often depends on Plethora — Cullen says Opium will not prevent the fits of Epilepsy — All cases depending on Aura are said to be owing to nervous affections & that here the opium has been found good — this Aura is of a curious nature — patients describe it as being some body travelling over some part of the body — the Aura Epileptica is the same as the Aura Arthritica — Opium is the most powerful remedy to prevent the return of this aura —

January 30th 1810

Hysteria — in this disease Opium is often used with success — there are cases in which it must be long used and there are some where it does harm — we may give it internally or by Clyster —

Palpitation of the Heart often depends on an Organic affection of this organ and when this is the case Opium can do but little good — there are cases of Asthma in which Opium does good — where this disease depends on turgescence of the Lungs opium is not good — but in spasmodic & catarrhal Asthma opium is often used with advantage — Asthma is often an arthritic affection —

look at top of page 329 —

larger doses of Laudanum —

The Sick Head ache is often of Gouty origin — and it is difficult to explain its nature — but certain it is that large doses of Opium in coffee is a good remedy for it — It is a sad disease and is the companion of the finest women in society — I know little of Diabetes — but it is often of Gouty origin — Dovers powder often cures it — Opium has been used in Ophthalmia — in the most violent cases a few drops of Laudanum dropped in the eye have given relief — In Scrophula, opium used in form of a wash has done good — Opium is useful in some Tropical diseases — here I am to keep its diuretic operation out of view — it has done good in Anasarca by creating great sweating — Our medicine is well adapted to anasarca from Ob—

Jany 29th 1810

In some cases of Ischuria, the use of Opium has been found very advantageous — In cases of difficult & painful menstruation opium is indispensable — it is used in the form of Dovers powder — in this disease opium has been combined with Camphor —

Small Pox — in this disease opium has been long used — during the Inflammatory stage opium has been found hurtful except in case of convulsions coming on — Dr Cullen says it is good in the suppurative stage — In the Confluent Small Pox it is frequently used — after the Inflammatory stage has subsided opium may be given 2 or 3 times a day — In the Secondary fever succeeding small pox, some have used Opium &c —

In Measles - Sydenham was too fond of using Opium in this disease - but it is sometimes very necessary - In the hoarseness succeeding measles Opium is useful - of Opium in Scarlatina I have nothing to say - I have not much to say of Opium in Hemorrhages - it is less adapted to the active than passive hemorrhages - in some cases dependent on irritation opium is very necessary - In the Menorrhagia Dr Cullen has not found Opium of service - Opium combined with Ipecacuanha is one of our best remedies in Uterine Hemorrhages - I give Opium gr 1 Ipecac 2 gr - 2 or 3 times a day - the patient receives much advantage if there is some perspiration created and a little nausea - in some cases of hemorrhage threatening Abortion we often use Opium combined with Ipecacuanha - I believe that Opium is not used internally in Hemorrhois - opium injures in this disease by creating Costiveness - Opium externally applied has been used in Piles - I have used it in form of Cataplasm - Epistaxis is frequently an active hemorrhage - I do not recollect to have given Opium in this disease - when I used lead I combined Opium with it - The management of Hemoptysis is very delicate - I believe all stimulating medicines must be hurtful - cool air, bleeding, blisters are necessary - but I have used the Brown Mixture in this disease without any bad effects -

The Phthisis Pulmonalis is a disease in which we can do little - I cannot manage it at all without Opium - I use the Brown Mixture - Opium is used in Dysentery with great advantage - Dr Cullen condemns its use in this disease - Dr Heberden used it - Sydenham trusted the cure of this disease almost entirely to Opium - he gave 25 drops every 8 hours he found this plan very useful -

look at top of page 367 -

Dovers powder

℞ Pulv. Ipecac. et opii aa ℥i. Sulph. Potass. ℥i. M. ft. pulv.

Signa XV grs every 3 hours —

825 look at page 315

January 26th 1810

In the Asthma of old people, opium is given with great disadvantage in many cases — but combined with Ipecacuanha it sometimes does good — In nephritis patients will bear very large quantities of Opium — it is often given without any regard to drawing away blood — Rheumatism is divided into acute & chronic — the former is treated best with V.S. blisters, bandeaux &c — but where Rheumatism assumes a periodical form we cannot cure with the antiphlogistic plan — it is useful in acute Rheumatism to excite complete sweating with the Pulvis Doveri (or Pulv. Ipecac. Compositus) — ℞ Pulv Ipecac. ℈. Opii āā ʒi Sulp Potass ℥i ℔ x gr. of this contain gi opium — dose 15 grs every 3 hours till sweating is excited — the Vitri Tart. or Sulph Potass add nothing to its virtues — I have used in its place ℥ Arabic — perhaps Nitre would be better in some cases — I would not advise you to adhere to one uniform formula — I differ from it often — Dr Cullen says the powder is to be given in the morning — patients are to be laid in woolen — this is an important direction — I always direct blankets to be used — the powder is best taken by making it into a bolus with Syrup — thus it is best taken — no drink should be taken until sweating is induced — drink will induce puking — when the sweat breaks out small quantities of weak tea should be taken — if the sweat does not affect the limbs, more clothes should be laid on —

Thus med ℥j in 24 hum —

is boiled bricks may be used for that purpose — whey made of wine & milk may be drank during the sweating — patients should not leave the room for a day after and they should avoid cold — When Dover's powder fails to excite sweating it always increases the pains of Rheumatism — but sweating greatly relieves — and by it we can spare a great deal of blood — When Ipecacuanha is added to large quantities of Opium it will not destroy life in many cases — It destroys the narcotic qualities of Opium — The Dover's powder of the Dispensatory has been accused of having too many ingredients in it — A man who prescribed a great many medicines together, was asked by his patients why he did so, you fool said he, I do it to let the disorder chuse which it likes best — Gout is often an inflammatory fever and is not safely treated with opium — the Gout in the stomach is treated with ~~Gout~~ opium with advantage in many cases — Opium may be carried to a great extent — I have given 400 gtts in 8 hours — Besides opium, Brandy, Ether and Ginger are used — with respect to the two first I would say to you Cavendum — the Ginger may be safely used — Stimulants of this kind must be used in gout of the stomach — Sir J Banks used to boil the Ginger in milk — but I have found it ungrateful — 100 drops of Laudanum with a little Ginger will answer the place of much

look at top of page 321 —

 look at bottom of page 319 -

I have found opium to be of great use in Asthma -

Pertussis when attended with fever is best relieved by bleeding - but when there is little or no fever opium is the best remedy - as a palliative the Barons mixture may be used -

Pyrosis - of this I cannot say much - it is said that this disease is increased by smoked meat but mitigated by fresh meats - Opium has been used - Malleate pyrosis is similar to Dyspepsia - Dr Crumpe says it is only to be relieved by opium - I have not had much experience in this disease -

Colic - in this disease opium is used - but not very safe without previous bleeding - when there is much fever the patient should always be bled -

Colica Pictonum is sometimes treated with opium - in this disease opium must be given in large doses - 96 grs have been given in 3 days without producing sleep -

Incarcerated Hernia has been treated with opium - it relaxes the structure and makes the reduction more easy -

Mania has been treated with Opium - some striking instances of the use of opium in this disease are related by Dr Young - I have used it largely but never found a cure from it - Opium must be a precarious remedy in Mania - it might do in timid Maniacs - in the Mania of puerperal women opium has been used with advantage - Mania from Brandy has often been cured by the use of Opium - I generally am in the habit of diminishing the quantity of Brandy & give Opium -

Gangrene - in some cases of this, Opium has been used with success* — Pott has used it in Gangrene of the Toes —

Ulcers of every kind have been treated successfully with Opium - In Cancer, I can say but little of the use of Opium - but some writers say it is a most injurious medicine in this disease - Opium appears to increase irritation in Cancers - and it is bad remedy for Cancer —

Syphilis has never been cured with opium alone - I never knew it do good but where Mercury had been before taken —

In Gonorrhoea, opiate injections are used - but I use it less than formerly in this disease - In Chordee opium must be used but the dose must be large — I have always recommended Opium to check salivation from Mercury - I advise the patient to use a gargle to wash his mouth - ℥j Laudanum to 1 pint Aqua milk warm - but I mostly give opium internally; 3gr of the solid opium every night - it subdues a salivation very soon - I sometimes I give a powder similar to Dover's powder - I first mentioned this mode of preventing the bad effects of salivation - I condemn the practice of cold water in this disease - Opium is the first & medicine of which I treat under Narcotics.

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*Opium could never have cured gangrene. It would rather [illegible] it [illegible] in [illegible] nature in the [illegible] [illegible]

Hyosciamus Niger — this article I think is not a native of America — but I have seen it very plentifully in the United States — I have seen it in Virginia where they call it "Devil's Cabbage" — it is a powerful stimulus — a small quantity of this medicine has produced violent Colic — it affects the eyes, in many cases, considerably — there is a considerable effect produced by the vapors of Henbane — Dr Boerhaave was rendered giddy in making an infusion of this medicine — It appears much allied to Opium — Henbane generally produces laxative effects — it often proves very diuretic — it is certainly a most powerful stimulus — a single pill has produced weakness of vision and other bad effects — I have frequently prescribed it as an Anodyne in the place of Opium and I believe it is often as safe as the latter medicine in many cases — Convulsions have been cured by Henbane in large doses — it has been used in Mania, Epilepsy &c gr i is the medium dose to begin with, of this medicine — Dr Fothergill has cured cases of Insanity by this medicine in doses of 3 gr — in cases of Madness from Intermittent, an infusion of Henbane has cured —

In Hemoptysis, Henbane is often used with advantage — in Puerperal Mania, Fothergill succeeded with Henbane in large doses — in this disease the narcotics are the best medicines — it creates delirium more readily than Opium, as some say —

~~Flesh are is ~~[illegible]~~ them~~

* it's a great lie, they never eat the leaves or any other part of it

Henbane has been used in Tic Doloreux — it has also been used in Pertussis or Hooping Cough in the treatment of Chordee it may be useful in the form of extract — 7 grs have been given in a day without injury — it may be given largely when gradually increased — 40 grs have been given in one day but this produced bad effects — the Henbane should be prepared every year or else it is mostly injured by keeping —

February 1st 1810

I know no two medecines more allied than Henbane and Opium —

Datura Stramonium is a very common plant called James Town weed &c. this an annual plant and is distributed over all parts of our country — some cattle & goats eat it, sheep eat the seeds, cows eat the leaves, tho' Linnaeus says they do not partake of it — Hogs are rendered drunk by eating it —
The extract of stramonium is said by some to be sedative, but I deny this affection — it is used by many to exhilarate the spirits when opium cannot be obtained — I believe it is a greater stimulant than Opium — the virtues of this plant are related by the late Dr Cooper — it sensibly affects the pulse — one grain of the powdered leaves raised a pulse from 72 to 80 in a minute — 6 grs were given to a man with a pulse 80 — in 6 minutes it was 84 — it created dullness of mind — sleeping — headache —— this article has sometimes produced a salivation — this vegetable has produced Tetanus and Hydrophobia —

It was used by soldiers once by mistake for lamb quarters — it produced Tetanus — the seed being swallowed by some persons occasioned Hydrophobia — a case of this kind is related by Dr De Witt in the Medical Reporting of New York —

The diseases in which Stramonium is used are various — it has been given in Mania, Epilepsy &c — Gooding employed it in dose of 2 grs in Mania, but he never cured with this medecine — The reason why this medecine has failed when the extract was used, depended on the slovenly manner in which it was prepared — The tinctures of the seeds of Stramonium are said to be better than Opium as an Anodyne — and to have cured all affections of the mind — Mr Bergius speaks highly of the Pt. Stramonium and says that he has cured Maniacs with it — he says it is equally good in Melancholia — when the pupil of the eye became dilated he ceased its use — he always applied a seton to the neck when he used the medecine — I have followed this practice with some success — Dr Archer of Maryland has used this medecine with great benefit in Epilepsy —, he gave 2 grs of the powdered seeds, in form of a pill every 4 hours, which was a bold practice — he says low diet and small bleedings should be attended to — then he says it mitigates the fits of Epilepsy — he says the best seeds are the brown ones — I have had much experience with this medecine, and I must differ from Dr Archer — I have used it in Mania & Epilepsy — I will not assert that it was always beneficial — but I must say it has cured some patients and often done good —

+ Dr Physick has found it very beneficial in Cancer —

I had a patient with Rheumatism who took 1 gr a day — afterward lost some blood — in a few days increased the stramonium 2 grs a day — in a month the dose was increased to 18 grs — and afterwards 30 grs a day — which perfectly cured him and he was discharged — I have seen it produce very bad effects on the system — I have used the Ext Stramonium in Mania with great advantage — I cured a woman who had been affected with mania 6 years — she used small doses at first, increased one grain every night and at last took 32 grs a day — a great dilatation of the pupil was occasioned and paralysis of the eyelid of the same eye which was removed by a blister to the Temple — Stramonium promises to be useful in Mania from intoxication — I have not used it in this disease but I have heard of it being thus employed with success —

This medicine has been employed in Dropsy — some cases are related in the Phila Med & Phys. Journal — I have used it in old sores from Buboes — Stramonium has been used in Scrophulous Cancer — I believe not internally — the bruised seeds boiled in milk and applied to local inflammation of Gout are said to be good, but I think it is a dangerous remedy — an ointment has been made from the plant — it has been used in Itching but with great disadvantage to patients in many cases — when Stramonium ointment is applied to the sores of Blisters it is very injurious and has produced very deleterious effects — The Extract as I make it is as follows — The adult leaves are pressed, till the juice is forced out — this is

Atropa Belladona is a strong stimulant — produces dilated pupil thirst &c. —

evaporated gradually either by heat of fire or the sun — then it is put away carefully —
The dose of this with me is 1 or 2 gr at first — in 2 or 3 days I increase 2 or 3 gr and gradually increase to 30 gr in many cases, often to 15 or 20 — sometimes we must leave off the medecine for a few days — it often produces great dilatation of the pupil and sometimes a partial paralysis — it has produced in Maniacal patients brisk eruptions &c this is favorable —
Datura ferox grows in West Indies — this is said to form an ingredient of a secret poison — thieves are said to give it to persons they want to rob and women give it to their husbands when they want to commit actions not fantastical — this is allied to the other species — it is very stimulant

February 2d 1810

Solanum or Night Shade is a narcotic — the common Solanum nigrum grows plentifully in Virginia — it produces purgative effects in small doses; taken largely it pukes — it belongs to the family of Stramonium —
Solanum Dulcamarum is much used in this city by the French in Syphilitic pains — it has been known to salivate —
Nicotiana or Tobacco this is a narcotic — and is too well known to all of you — the emetic property, emetic & diuretic effects are obvious — it is called Nicotiana in honor of Jno Nicot who first brought it to France

The witty sayings of King James 1st.

+ there's no wit in it, as it's here written: however, there were might have been in his expression.

+ go & grab yon goose

~~In Pneumonia after V.S.~~
~~℞ Nitri Dij — ℥j~~
~~℞~~

Dr Drake's patients ℞ Digitalis is used 10 or 15 days at one — it has lost its celebrity as a medicine — after ~~the~~ bleeding in some cases of Pneumonia ~~[illegible]~~ are in fashion

+ why so fashionable?

℞ Nitre Dij — ℥j
℞ Digitalis 60 to 80 drops
aqua ℥viij — dose ℥ss 3 or 4 times a day

+ it is not licuta

it is a plant peculiar to America — and was formerly held in great regard as a sacred vegetable and was engrafted with religious ceremonies of the Indians — King James 1st had a great aversion to Tobacco and he said it was the very essence of hell and that if he were to invite the Devil to dine with him, he would give him three dishes 1st A pig which he never ate 2 & a tobacco pipe to smoke for the Devil's digestion — Tobacco was first used as an Emetic in New England — In Colic with Intussusceptio, injections of Tobacco have done good but it often fails — I might speak of Tobacco injections in Hernia incarcerata — it has enabled surgeons to reduce the Hernia without an operation — it is necessary to be nice in the quantity of the vegetable — Di or Zj is generally used — The infusion has been used to accusitate persons apparently dead from drowning & hanging —

Digitalis or Fox glove is certainly a stimulant as I first proved the very class in 1996-7 — it is also a narcotic — it was not known as a stimulant until I declared it such!!!!! it often injures the system in Dropsy by its stimulant power — +

Umbelliferous plants — the only one of these which I am to speak of is the Conium Maculatum, or ~~the~~ Hemlock — I believe it is not a native of America — it grows in many places of our country — this plant is not so easily known as some think — it looks like Fennel at the first sight —

dose of Ext Cicuta gr 1 to 100

Hemlock Bath

Take half of the seeds & some of the leaves
boiled in 8 galls of water to 6 — then add
several gallons of cold water —

You will distinguish Hemlock by its spotted stalk and its disagreable smell when bruised — by the open under surface of the leaf — it kills birds and some animals — but goats eat it, and tobacco without bad effects — the fact of the goat eating hemlock has been long known — this is supposed to be the plant with which the Greeks destroyed some valuable citizens — it kills without much pain — this vegetable contains vitriolated Tartar — Dr Darwin places this vegetable among Incitant — I think it less stimulant than Opium, Stramonium &c — large doses produce convulsions head ache, vertigo, aphonia, madness, delirium convulsions, blindness, salivation, discharge of urine — loose stools &c — it inflames the intestines of animals as we are told — it is very certain that Hemlock often salivates — I have seen this effect — this article has excited the attention of Physicians in the cure of Cancer & Scherrus for a long time — some physicians say it is hurtful — But in sordid venereal ulcers it is supposed by many to be very advantageous — the Hemlock has been used in form of bath in Scotland & a decoction of Hemlock has been used by means of a syringe in Cancer of the Rectum — I have used it in Cancer of the Rectum in form of pill and Enema & it always lessened the pain of the disease — Ulcers near the Ancle joint are cured by Hemlock in many cases in form of Fomentation — Mr Whately an English surgeon uses the Hemlock in old ulcers — I have seen Hemlock used in

Lepra and with manifest relief — the medicine was taken internally — it always occasioned a great discharge of cuticular ~~act~~ scales — this is not the only case of Lepra treated with Hemlock — there are many cases related by writers — this medicine has been used in Tic. Doloreux — I have seen it do good in this disease — several writers have used it in Syphilis and the sores succeeding to Buboes — Dr Butler says that Gonorrhoea may be cured by x grs of Hemlock — Dr Withering has used this medicine in Chronic Rheumatism — I have used it in this disease and it certainly gives relief — In Scrophula, this medicine has been greatly used and I have employed it with manifest advantage — In the Gangrene of old ~~children~~ people, Hemlock has been used — I have seen it do good in a Gangrenous affection of the hand — prepare the medicine as follows —

Gather the leaves of Hemlock in June, pick off the little leaves and throw away the stalk — dry the leaves in a gradual heat without light — then powder it and keep it in close vessels — from x to xv grs is a dose and may be gradually increased —

Hemlock is best that has grown in dry soils exposed to light — greenest leaves are best

Conium Maculatum — inhaling an infusion of this medecine mixed with Ether has been used in Consumption — this medecine has been used in Jaundice — In Pertussis, our medecine has done much good — Dr Butter has written on its great importance in this disease — he directs an infusion of it — The manner of preparing Hemlock has influenced the virtues of this medecine —

Sub. Narcotic — By this I mean certain articles which are partially narcotic —

Lauro Cerasus is the Prunus Lauro Cerasus of Linnæus — it is not the Laurel of our country — Cullen calls it a most powerful sedative — I have always supposed it to be a powerful stimulant — It has been spoken of at large by Dr Shelly in his Inaugural Dissertation — this article has been little employed in practice, because it is of all stimulant, a most powerful one —

Camphor — Dr Cullen calls this a sedative — but I believe it to be a stimulant — it is an article of very great importance — the reason why it is not much employed is because physicians are not quite satisfied of its effects — it is the produce of different shrubs — it is most procured from the Laurus Camphora of Linnæus — but it has been obtained from Spice wood, Sassafras &c camphor is considered as a vegetable principle — this Laurus Camphora grows in Japan, Cape of good Hope &c — in Japan it grows so large that two men can hardly embrace its circumference —

Camphor obtained from the Laurus Camphora — the tree is cut into blocks & split open — concrete pure camphor is seen which is removed & called Head Camphor — the stem scrape away more Camphor but this has some fibres of wood in it — called Belly Camphor — the 3d kind contains most of the wood & is called Foot camphor —

- Camphor Julep -

℞ Gum Camphor ʒiss - Pulv. G. Myrrh ʒi - Sacch. alb. ℥ss -
Pulv. G. Arabici ʒiss - Aquæ ℥viij - M. ft. Julep.

I would prefer a Julep rather less in size as follows

℞ Gum Camphor ʒi Pulv. G. Myrrh gr. xviij Sacch. alb. ℥ss
Pulv. G. Arab. ʒiss Aquæ ℥vi M. ft Julep - Signa - Table spoonful every 2 hours -

the Inhabitants of Japan obtain the Camphor by scraping the Laurus Camphora and they have 3 qualities - the Head Camphor of superior quality - the Belly Camphor or that of the next quality - the Foot Camphor or that of the most inferior kind —

Camphor often occasions nausea and has a bitter taste — it is brought to our country in masses with a greasy feel - it has a strong aromatic smell - floats on surface of water — and if exposed, readily evaporates — Camphor enclosed in glasses hermetically sealed lost nothing of its weight — but if kept in vessels not tight it evaporates — Camphor is soluble in twice its weight of water when water is added to a solution of Camphor in Spt wine, it is precipitated ~~it~~ in a solid form — it is partly soluble in water — it is soluble in oils — Camphor is said to be rapidly soluble in water impregnated with Carb. Acid Gas — I believe the best mode of prescribing Camphor is in form of a Julep — The Camphor is to be bubbled in a mortar with G. Myrrh and Sugar — then the water is to be added — ℞ Gum Camphor ʒiss - Gum Myrrh ℥i Aqua ℔ss Soft Julep — I have often prescribed this in Penna Hospital — ✗ Sugar ʒi - G. Arabic ʒiss — Camphoric acid unites readily with Alkalies & Earths — Camphor is acknowledged by chemists to be a peculiar substance — they call it Camphorating principle — La Grange says it is a volatile oil concreted by Carbon — Camphor does not destroy Moths - though it kills most insects — it has a great effect on flags - it destroys insects without destroying their organization — it does not injure the colours of their wings — it does not change the colour of feathers — the method I employ is to put them into a glass vessel with a small quantity of Camphor

and covering the vessel with fine paper, perforated — a very small quantity affects Birds — but 2 gr will not kill a sheep — on examining the bodies of Animals killed with Camphor — the stomach was found inflamed, so was the Brain — there was a great secretion of Bile — Camphor introduced into the Rectum of animals often induced death as perfectly as when taken by the mouth — what I have said, clearly proves Camphor to be an Excitant or Stimulant — the active powers of Camphor appear to depend on the vapour of this article — I think it acts chiefly on the nervous system — but I believe a portion is sometimes absorbed into the Circulation — the smell of Camphor has been perceived in the perspiration of patients — Camphor externally applied to frogs entered the system by absorption — Mr. Mc applied powdered Camphor to the skin of frogs, and found the smell of this article in the abdomen — bowels &c — Plants put into a solution of Camphor vegetate more than plants put into water alone — you will find this a pleasing experiment — you should have the Camphor in a precise dose, for a quantity too large kills the plant very soon —

Feby 6 1812 —

Of the effects of Camphor on the Human body —

a large ~~camph~~ dose of Camphor produced delirium frequency of pulse, vertigo, paleness of the countenance &c — some physicians say that Camphor reduces the frequency of the pulse and lessens the heat of the body — it has produced convulsions, &c — it produces costiveness when taken largely — the most of the ancients thought Camphor a sedative —

+ what nonsense —

Hoffman asserts the sedative quality of Camphor — The notion that camphor is a refrigerant has been advocated by many — yet some of these persons are compelled to say that Camphor often produces stimulating effects — Dr Cullen gave ½ of Camphor to a patient without increase of pulse — I have seen cases in which Camphor certainly exerted stimulating effect on the system — Dr Dunlap says that Camphor allays inflammation — Dr Wright thinks it a heating medicine — of the use of Camphor in diseases — having assumed it as a fact that Camphor is a stimulant, I shall speak of inflammatory affections — I should suppose that many Intermittents tending to the typhoid form, might be cured by Camphor — I would advise you to give a small dose before the paroxysms — I have never employed it in these fevers — Camphor has been employed in those fevers called Nervous — Camphor out of the body is antiseptic — this property of camphor has doubtless led many to use it in fevers called Putrid — Camphor joined with opium is an excellent sudorific — it is generally given in the evening — some advise Camphor to be combined with Snakeroot &c — Camphor has been celebrated in Gangrenous affections — It has been preferred to all other medicines in Gangrene — it has been used internally and at the same time applied to the mortified parts — it must not be used it is said in Gangrene with fever — I suppose that the virtues of Camphor do not depend on its Antiseptic virtues in curing Gangrene — it has been praised for its

* This has nothing to do with the proper business —
& What advantage from such references
as we have all along — Vulgar —

efficacy in old ulcers — I think Camphor is peculiarly adapted to Gangrene of Typhus — for the gangrene here is more dependent on debility than any thing else — in some parts of the United States a Cataplasm of Sassafras Bark has cured Gangrene — I told you that Camphor is procured from ~~Camphor~~ Sassafras — and this practice may be very good — Camphor has been used in confluent small pox — it has been supposed to act specifically on the variolus matter — but I fear that the experiments on this point have not been judiciously conducted — The Swedes pursue the practice of laying cloths wet with Camphor on surfaces of confluent small pox — Dr Jenner has said that the odour of burning stone has prevented vaccine matter from affecting patients — I think I have seen this in one case — but it was where sulphur was used for the itch and perhaps this disease prevented the vaccine matter from acting — Camphor has been employed in general and local Inflammations — Dr Hoffman says he has cured Inflammatory diseases with Camphor — in fever the Camphor is given during remissions — In Puerperal Fever large doses of Camphor have been given with success — I think it has often succeeded — but this fever is often Inflammatory and demands bleeding — I have often drawn blood in this disease and thus cured my patients — here Camphor would have done harm — This is a very interesting disease and little knowledge of it can be gained from books — It is mostly Inflammatory in our country —

Camphor has been used in Rheumatism — Dr Cullen says it removes Rheumatic pains and the pains of Gout — it sometimes translates the pain of Gout from one part to another — In acute Rheumatism, it frequently happens that Camphor translates the pain — much mischief is daily done by Camphorated liniment externally applied — I have case in which death was produced and I believe it only depended on a translation of pain from the hip to the brain — Camphor has translated disease from the arm to the tongue and thus I have seen paralysis of the tongue —

February 8th 1810

The powers of Camphor in repelling the pain of Gout are truly remarkable — when applied to the feet, it throws the pain on the stomach — applied to the latter it throws it back to the feet — In Rheumatism the application of Camphor has done good — a solution of Camphor in hot water has relieved the pains of Rheumatic Tooth ache — In Gonorrhoea the Camphor has done good — also in Chordee — In Bronchocele or Goitre this Medicine has been used — this disease prevails in the United States and arises from the same causes as Intermittents — The Camphorated Liniment is applied to the swelling — Camphor has been used in Spasmodic diseases as Epilepsy &c — In Chorea ~~Sancti~~ Sancti Viti; Camphor has been successfully employed — Dr Elliot has used this medicine in Chorea with good effects — I do not know that Camphor has been much employed in Tetanus — In Spasmodic affection of the Oesophagus

Camphor has been used with great advantage in some Dropsical affections as Ascites, Camphor has been used — In cases of Painful Menstruation, Camphor is used with advantage — Camphor has been used in Mania — in the disease called Nymphomania — I have seen the last disease cured by great depletion — there is mostly a morbid affection of the Uterus — Camphor is said to have cured many Maniacal Patients — Delirium is often treated with Camphor — I have known it to succeed after bleeding had failed to do good — Cullen asserts the power of Camphor in Mania — it must be used in large doses — perhaps the reason why this medicine has so often failed was because it was not given in doses sufficiently large — I have frequently given it in Mania and very largely and I have succeeded in curing the patients when every thing else had failed — I gave about ½ ℔ in a day for some time and he gradually regained his reason — Camphor dissolved in Gum Arabic has been used in Burns and I believe it has done much good — it must act much like the Spt. Turpentine — Camphor combined with Drastic purgatives lessens the acrimony of the latter — Camphor combined with opium is very good in old ulcers — it is to be applied externally — Camphor joined with Peruvian Bark is more efficacious than Camphor alone in curing Gangrene and Fevers — Camphor when combined with Mercurial medicine renders the latter more mild in its operations by rubbing them together the Camphor takes up a portion of the acid from the Mercury — Camphor is said by some to increase the powers of Mercury in Herpetic affections, old Syphilitic affections &c —

In obstinate ulcers of the Scrotum &c

℞ Unguent. Mercuriale ℥j –
Gum Camphor. ℥ss solut. in spt. vini q.s.
M ft. Ung. rub on the parts –

Di Camphor added to ℥ij of Mercurial ointment is said to increase the virtues of the latter medecine — I think that Mercury should always salivate in order to effect a perfect cure of Syphilis — I have often used the Combination of Camphor and Mercurial ointment, and I believe the power of the latter was increased, but the salivating property was not lessened — I have used this ointment in an old ulcer of the Scrotum partaking of venereal taint — I used this ointment and cured my patient after many other medecines had failed — The sore was very large and I cured it completely — Dr Cutbush of the Navy has used this ointment in such cases with great success — I generally add to ℥ij of Camphor to ℥ℓ of Mercurial ointment — Camphor is said to mitigate the disagreable effects of a large dose of Squills — Camphor is said to lessen or destroy the effects of Tinct. Cantharides — Thus we may ~~confine~~ combine the Camphor and Cantharides and give it with safety — Camphor applied to the surface on which a blister is to be applied, is said to prevent Strangury — but some say that Camphor induces Strangury — Dr Cullen says he never saw it do harm in the urinary organs — I have never seen such inconveniencies from it — I believe on the whole that the Anti strangurian ~~of~~ powers of Camphor are not to be depended on — when I find Strangury come on I apply warm water in bladder to the Pubes, sometimes I give Opium and if the symptoms be violent I apply mustard poultices to the ancles & with success — Camphor has been used in Retention of Urine —

+ found in a bagg near the Urinal bladder —

0 dark brown color — the best has a farinaceous feel & is of a strong odor — &c.

+ also resin soluble in ether & alcohol & gelatin —

0 more so than opium —

a substance like smelt in Alaska is obtained from the Pole Cat the Pole Cat —

The dose of Camphor should be at first in small quantities - I call them small when they are only 5 or 6 gr. - they are large when they amount to ℥i or ℥ij in 24 hours - The Paregoric Elixir as I told you contains a good deal of Camphor - Camphor is slowly soluble in the stomach and ought not to be used in substance but in the form of the Julep I have mentioned -

— Feby. 9th 1810 —

Moschus or Musk - This is the product of an animal most common in Asia, Siberia &c. - the substance musk is derived only from the male sex - it has a fragrant smell - it smell is so strong when fresh as to draw blood from the nose of such as inhale it - Musk being an expensive drug it has been much adulterated - vessels in which musk has been placed retain the smell a long time - musk is the most odoriferous substance in nature - It is inflammable and to the touch communicates a greasy sensation - Musk contains a saline matter the qualities of which are not certainly ascertained - I consider Musk as a Stimulant - I am not able to say much of its effects on the pulse, but it increases its frequency - it raises the spirits, creates sweat & finally sleep - as far as I know this medecine was first recommended in Arthritic Colic by Sir ~~Gout~~ John Pringle - in Gout of the stomach musk has been said to do great good - ℥i of Musk would be called a large dose - 5 gr. a small dose - In Tetanus, this medecine has been much used - it allays the convulsive spasms of this disease -

Artificiale Musk — by Margraaf —

℞ Nitric acid ℥iij' Alcohol

Reect. ℥ij — digest + a yellow matter is

separated — wash it repeatedly in acid & then

wash it water to remove acidity — this is used

instead of Castor is

℞ Mosch. Artificial ℥ij ℥ij ℥ij

Q. Arabic ℥iij

Aqua — ℥viij + digest in a close

then bis vel ter in dies —

+ from small glands near the bladder & anus

+ made of Castor ℥i

Spirit thi —

M —

the castor is chiefly removed

In many Convulsive diseases, Musk has been used with advantage — The use of Musk in Hydrophobia is derived from Chinese — They have the medecine in very great purity — They combine it with Cinnabar — I cannot say much respecting the use of Musk in Hydrophobia — 4 grs of Musk, we are told, cured Inveterate ~~Cat~~ Asthma — In Colica Pictonum, the Musk has been used with advantage in combination with Opium — Musk has been much used in Mania by Dr J Mason Cox — In the Tremors, Subsultus Tendinum of low Nervous fevers, the Musk has done good — Musk has been recommended in Small Pox, Gangrene &c

The reason why Musk is so little used in Practice in our Country is because this medecine is extremely dear and always adulterated —

Castor — It is a substance peculiarly odoriferous — It is obtained from an Animal — The best kind of Castor comes from Russia — It is obtained from our Country, but it is adulterated — the properties of Castor and Musk are very nearly the same — both contain resinous and saline matters — This article has been employed in Typhus — In Epilepsy, our medecine has been much used — Castor is given in a dose of from 8 grs. to ℥j — There is a Re. Castorei in the shops — Some writers suppose Castor to possess Narcotic powers —

It is narcotic when used in large quantities

Crocus or Saffron — this is an article extremely common — it is used in what is called "vulgar old womens practice" — it is common in our gardens — when this medecine is chemically examined it is found to have peculiar properties — Munro says that Saffron is an excellent aromatic plant — It is, says Munro, a gentle anodyne — it is often mixed with other substance to form Cataplasms — Bergius says it renders Hysteric patients worse — the smell of Saffron when strong is said to create violent headache — The great character of Saffron is its power of exhilarating the spirits — but it is said often to create great sadness — Dr Cullen thinks very little of Saffron as a medecine —

Valerian — it is not a native of America though we have it in our country and it is worth investigating — it is a Stimulant — it is only the root that we use in medecine — it has a peculiar odour — it affects cats very remarkably — its effects on the pulse have not been much attended to — it act as a diuretic, diaphoretic and in a large dose it is purgative — It rarely creates vomiting — the Valerian has been long in use — It has been much used in Epilepsy — perhaps it has received more credit than it deserves — Dr Cullen advocates the anti-spasmodic powers of this medecine — Epilepsy often depends on organic affections and cannot be cured by any medecine — but Epilepsy has been cured by Valerian. I have used it in our Hospital

x he ought to know something of it & not let a man with plead ignorance in such a case

but I cannot say it did much good —
In one case of Epilepsy in this city I have seen the Valerian do much good — it appeared to depend on a worm connected with worms —
In Chorea ~~Sect~~ Sancti Viti, our medecine has been used —
In Periodical Head ache the Valerian has been used with advantage — I have used this medecine in Hemicrania with much advantage — I mostly combined it with Bark —
The Valerian has been recommended ℥ss 3 times a day in Amaurosis or Gutta Serena —
Gutta Serena may depend on affection of the Stomach and in this way the Valerian has cured this disease —
Valerian is a powerful Antiseptic — it has been recommended as an Anthelmintic — it is said to relieve great costiveness — There is a Fract. Valerianæ kept in the Shops — It is best when given in substance in powder from ʒi to ℥j in 24 hours —

Coniferæ February 12th 1810

Pinus. Pine — produces Turpentine of different qualities. This turpentine applied to the skin occasions much inflammation — In wounds & ulcers turpentine has been used with advantage — The Ol. Terebinthinæ is much used in burns and scalds — it is much advocated by some and opposed by others — I know nothing of this practice by experience — when we wish to give this article internally we should combine it

℞ Turpentine ℥ss
Yolk of an egg
Water 1 in 2 gills
Mist Injectio —

In Sciatica

℞ Turpentine ℥ij — Mel. ℥j the dose two tea spoonfuls
in mane et nocte —

with some bland substance as honey or we may use it in pills — Turpentine may be so managed as to act like a purgative — ℥ss of turpentine is triturated with a yolk of an egg so as to be suspended in a quantity of water, this is used in form of Glyster — The smell and taste of Turpentine can be ~~smelt~~ discovered in the Perspiration of those who have taken it — Turpentine also passes off by exhalation from the Lungs — Injections of Turpentine and water have been used to allay vomiting in Yellow Fever &c — The diuretic property of Turpentine has been hinted at — Gleet is a disease in which Turpentine has been much used — I have used it frequently and with advantage, never with inconvenience — XV or XX gtts. of Bals. Copaiva may be given 3 times a day — I use the Turpentine in form of pills — In Fluor Albus, this medecine has been much employed but with no great success — This article has been employed in Dropsy — some writers speak of our medecine in Hydrothorax An essential oil is obtained from turpentine by distillation — when applied to the skin it inflames very much — in the stomach it creates a sense of heat — in large doses it brings on Strangury. In Sciatica the following prescription was used by Dr Hume — Re Turpentine ℥ij Honey ℥j M — dose two tea spoonful morning and evening — Ol. Terebinthina has been recommended in Internal Hemorrhages — this medecine being a powerful stimulant we might suppose it well adapted to Passive Hemorrhages —

+ Garlic is good in the same disease

+ It is also obtained by Distillation

o This mixture is made by basting the tar on a piece of mutton & heating it

o Copaiba Officinalis

In Gonorrhœa -

℞ Calomel grs iv Bals. Copaivi gtts xxx or L. Pulv. G Arabici ℥ss -
Aquæ ℥x ft Injectio -

If you doubt whether Gleet exists or no, give ~~ut~~ 30 drops of Injection
If discharge clears out in a week Gleet

Turpentine with Ipecacuanha has been used in Diarrhoea. Turpentine is an Anthelmintic — + Burgundy Pitch introduced into the ear has cured deafness — the pitch must be wrapped up in gauze and put into the meatus auditorius — Turpentine Pillcase is taken into the Circulation — I hold it as a fact that Turpentine is absorbed by the Skin when much handled — The Turpentine plaster has cured Tinea Capitis - but the cure is quite mechanical —

+ Pix Liquida — Tar — is obtained from the Fir tree — it differs from Turpentine in being Empy-reumatic — a mixture of mutton suet and Tar has been used in Ulcers — Herpes — Tar has been used in form of pills in Consumption & Tar water has been used in many diseases - it sometime acts as a diuretic — it has been found useful in Scurvy. Tar is now found to contain a large quantity of Benzoic Acid —

O Balsam Copaiva — the virtues of this article are similar to those of Turpentine — it has been recommended in Ulcers of the Lungs — In Gleet, this medecine is an important remedy — It sits on the stomach well when taken in a little wine — if exhibited in large doses it proves laxative — Gonorrhoea has been cured by the use of this medecine in form of Injection — I have used Calomel 4 grs Balsam Copaiv 30 or 50 gtts G. Arabic 3iss aqua ℥x M ft. Injection — this has often cured virulent Gonorrhoea — as long as the discharge is greenish or yellow you may suppose Gonorrhoea to exist.

+ Soluble entirely in Spirit –

A Gum Gutta
in Spirit Vini

In Hemorrhoidal affections the Bals. Copaiva has done good — I have used this Balsam in Arthritic Patients who could not take Gum. Guiacum —

Bals. Peru is of a strong flavour and somewhat acid — it is the produce of a tree of parts of Mexico — it is obtained by boiling the branches of the tree — it is of a dark colour and contains an acid probably the Benzoic Acid — It has been used in wounds of ~~the~~ Nerves — we are told of its success in Pulmonary Consumption —

Feby 13th 1810

Gum Guiacum — This is obtained from the Guiacum officinalis of Linnaeus — the Lignum vitæ is the wood of the Guiacum — this wood always sinks in water — it has little smell until rasped or heated — it has a pungent taste — this article is a true ~~gum~~ resin — this article is peculiar to the new world and was not brought into Europe until the discovery of America by Columbus — this medicine for a long time was the only remedy for Syphilis and continued so until Mercury was introduced — the use of this article in Syphilis is still attended to in Europe and in our country — I have known it, says Bell, to cure venereal disease — The venereal disease has been said to have been brought from America into Europe, but this is certainly incorrect — Mr Hunter used Guiacum in Syphilis — but I do not know that he cured with this medicine alone — In Gout our medicine has acquired much reputation — the following recipe is used ℞ Gum Guiacum ℥ij Spirit 3 pints the digest for some days — filter — the dose is a spoonful 3 times a day — this turns out to be no more than the Tinct. Guiacum of the Shops — The Vol. Tinct. Guiacum is used in Gout — I have used 3 ℥ of this medicine in a day in our Hospital —

In Rheumatismus after V.S.

℞ Pulv. G. Guiaci ℥ss – Pulv. G. Arabici ℥ij – Sacch. album ℥ss – Tere in mortario marmoreo et adde ✗ Aquæ ℥x ℔ft. Julap – Signa ℥j – for an adult –

w aq. Cinnam.

In Dyspepsia –

℞ Pulv. G. Guiaci – Rubigo Ferri āā ℈ij ✗ Pulv. Capsici ℈iv ℔ ft. pulv –

℔b Succ made by adding

Spt Sal am ℥iss to ℥ij ℞ Guiac –

we may begin with ℥j of the Tinct. 3 times a day and increase to ℥ss 3 times. It is an acrid medecine, but this acrimony may be obtunded by mixing it with milk. Gum is always milder in warm climates. In Rheumatism I have employed this medecine. I mostly use a watery preparation after bleeding. I use the following formula ℞ Gum Guiacum ℥ss Gum Arabic ℥ij rub these together add Aqua ℥x. Saccharum Album ℥ss to form Julep. Dose ℥i for an adult. a little while after the medecine has been prepared it turns of a green colour which sometimes makes our patients unwilling to take the medecine. Guiacum has been found useful in Colica Pictonum. I used the above formula generally. it operates as an universal stimulant. The preparations of Guiacum are well adapted to Arthritic Dyspepsia. Dr Hewson gives Guiacum. Rubiæ Tenui ana ℥ss Capsicum ʒ ss to the patients in our Prison labouring under Dyspepsia. In some cases of Dropsy the Guiacum may do good. that is the Vol. Tinct Guiaci. it acts as a diuretic. it may be used in powder ℥ss 3 times a day in form of pill. it may be used in watery solution as above. and it may be used in form of Vol. Tinct. Guiaci.

Gum Myrrh. This is of a brown colour and is pellucid. it has a fragrant smell and is aromatic. it shows an evident stimulating operation on the stomach when taken largely it produces frequency of pulse. as a strengthener of the stomach our medecine has been used. Myrrh has been used in intermittents. it has been used to the quantity of ℥j in 24 hours to prevent the paroxysms. In Angina Maligna the Myrrh and Bark combined have been found very useful. The Pectoral qualities of Myrrh have been much celebrated in England. Dr Cullen objects to it. The Practice of Myrrh in the scrofulous state of Consumption is an old one.

inert, inert practicioner! this would all stick in a fellows teeth; give 3 table spoonfuls

+ Swallowed without chewing

Myrrh has been much employed in old Ulcers & Sydenham used Myrrh with Fem in Helvis & Chlorosis — the virtues of Myrrh may be extracted by water or Spirit —

Siliquose plants — there are numerous — I shall speak of Mustard and Horse Radish — internally they have been recommended in many diseases — Mustard seed 3 spoonful have been given daily in Intermittents — added to bark it makes the latter more active — The mustard seed is sometimes used in Spirits — these plants have been much used in Chronic Rheumatism and Palsy — in Chronic Rheumatism the entire Mustard seed may be given 3 tea spoonful daily — it must be used unbruised for if in powder it proves Emetic — we must continue the use a long time — it may be swallowed easily in molasses — The Horse Radish is infused in wine and is a powerful medecine — it does good in Palsy & Rheumatism — Bergius recommends it to be ~~steeped~~ to the quantity of a table spoonful daily in Rheumatism — The Horse Radish & Mustard have been used in Dropsy — the active matter of these medecines is carried into the circulation and proves diuretic — but I wants forbid the use of these medecines in Inflammatory Dropsy and restrict their use to Dropsy from Debility In Scurvy these medecines have been found good — the Horse Radish especially made into an infusion — a weak infusion of Mustard seed cures violent vomitings — if the infusion be strong it vomits — I use a tea spoonful (of the flour of mustard) in a gill of water — stir it and let it subside — this certainly allays vomiting very soon — some of the siliquose plants eaten by animals have the matter of the plants carried into the system so as to enter their flesh — the external application of Mustard & Horse Radish is much attended to —

Gum Asafoetida

is the produce of the Ferula asafoetida of Linnaeus — the tree is cut off high up and the Gum exudes of a white color becoming gradually darker — the juice when first is very strong — it is a gum resin — the gum is in excess, but the odor resides in the Resin — the more odorous the better — the tree grows in Persia — I use it as follows —

℞ Gy Foetid ʒij
Sugar
Gum Arab ana ʒij
Aqua Menthae ℔ij —

~~to~~ here the is what makes it adhere good, agree
* take care of this part of the cure —

In using mustard externally we employ the flour of mustard - a plaster is made by combining it with rye meal and vinegar or milk - the quantities of each must be varied according to circumstances - mustard and Horse radish externally applied, stimulate the parts and create redness and if kept on long enough vesicate the skin - they act somewhat like blisters but discharge no serum - the pain of mustard plaster is greater than that of Cantharides - the mustard plaster acts only as a stimulus - the Horse Radish is still more stimulant and is therefore often employed with advantage - the operation of these is very immediate and certain - These sinapisms are much used in Convulsions from dentition and Small Pox - In Croup or Hives I have often used the sinapism of mustard to the anterior part of the neck. In Angina Gangrenosa or scarlatina, these sinapisms are found very useful In Vertigo, the use of sinapisms is very often necessary and of great importance - Sinapisms are often very precarious remedies - they sometimes occasion translation of disease - There are some cases in which deafness has been much relieved by strong sinapisms - Gout very often attacks the bladder creating Strangury, the latter is removed by the application of sinapisms to the ancles - I have often applied sinapisms to the ancles to prevent the return of Epileptic paroxysms - they should be applied an hour before the expected attack - Cholera Morbus is a disease in which no time should be lost - I have always immediate recourse to the use of sinapisms to the ancles - but I also use Laudanum freely - the use of sinapisms in this disease originated with myself so far as I know * sinapisms have been used to prevent the paroxysms of Intermittents - The siliquose plants have been recommended in diseases of the organs of Generation - as Barrenness -

Alliaceous plants as garlic, leek and onions are used — leek most stimulating — cloves of garlic may be infused in spirit & taken — they are used cut & made into pills with bread but this is not a good mode — the strength of the medicine is lost —

Diet drink

℞ Radix sarsaparilla ℥iij — Santal. rub. ℥iij — Rad. mezereon radix Glycirrhiza aa ℥ss — Pulv. G. Guiaci ℥iij — Aqua bullient ℔iv Ft. Haustum —

In Syphilis

℞ Radix mezereon ℥ij — Rad. Glycirrh. ℥ss — Aqua bullient ℔ij — Ft. Haustum —

Dr Rush uses Garlic by putting several cloves into a glass pint of Oz. Mouth. This is more agreeable —

I have generally used the Stimulant plants in substance but they are used in form of Infusion - I have of late used another mode of applying the mustard - I take a handful of the bran of Mustard, and put it into 2 or 3 gallons of warm water - the feet are put into it and are then sufficiently stimulated - this plan originated with myself so far as I know and I recommend it to you — F. L.!!

Thursday - February 15th 1810

Mezereon - it grows in the neighbourhood of this city - the decoction has long been used in Syphilis the recipe made use of by Dr Munro to form the diet drink ℥ij Sarsaparilla - ℥ij Red Saunders - Mezereon - Liquorice aa ℥ss - Gum Guaiacum Aqua bullientis ℔ij ℔ss -
Mezereon is used in decoction in various quantities for different diseases - the Lisbon Diet drink owes its virtues chiefly to the Mezereon & it has been used in old nodes &c - a drink has been made by boiling ℥ij Mezereon in ℔ij of water - add ℥ss liquorice - take a pint every day - this has been used in Syphilis - It has seldom done good except Mercury has been previously used - the Diet drink has been used with success in removing glandular swellings - Benj Bell has spoken well of the use of Mezereon in Syphilis - In old ulcers our medicine has been much used combined with Opium - A decoction of Mezereon with Mercury has been found useful in Hernia Humoralis or swelled Testicle - the bark of the mezereon in the mouth gives a pungent taste - on this account it has been used in difficult deglutition - I think it might be useful in Stammering -

Gum Ammoniac is little practised as an Expectorant —
It is of little importance
sometimes combined with Asafoetida —

The Bark, when applied to the skin excites a blister — the fresh bark is to be bruised in vinegar and then applied on the skin as we apply blisters — it occasions a copious discharge of serum — this has been recommended in cases of opthalmia; the bark is applied to the arms and legs — every one should be acquainted with this medicine — it is not a native of our country — the nearest allied to the Mezereum is the Zanthoxylum —

Evacuating Stimulants properly so called — Errhines are medecines which discharge a mucus from the nose — this mucus comes from the follicles of the Schneiderian membrane — the evacuation of errhines is often attended with sneezing — but the sneezing cannot vary the nature of the evacuated matter — Errhines often go no further than to restore the natural evacuation of the nose — but they sometimes increase the natural discharge — the errhines are often found good in Toothache and congestion — Cullen says that opthalmia has been cured by Errhines — I refer you to the 5th Vol of American Philosophical Transactions —

In Hydrocephalus Internus — errhines have been used — Sternutatories says D have been much used in this disease — I believe they have never been employed in this city in this disease — I think Errhines might do good in Epilepsy — see from organic affection of the brain — I have used Sulphat Mercury & Fo Snuff each equal parts — I believe there are many diseases in which Errhines might be used — In Deafness these medecines may do good — Some cases of deafness depend on obstruction of the Eustachian Tube from cold — the membrane communicating with the fauces is swelled — this occasions a peculiar noise &c &c &c and the next

+ Colts foot

This species of deafness is often a curable disease - I have cured it by applying blisters near the Mastoid Process — bleeding has done good — but I have used the sulph Hydrag & Snuff an equal part with success —

In Gutta Serena - the Errhines have been employed with advantage - this disease sometimes depends on gastric affection and is not connected with disease of the brain — We have used an errhine composed of ℞ gr of Turpeth Mineral to ʒi of good Snuff — I have used the Mercurial snuff with great advantage — I have used Setons at the same time — When Gutta Serena depends on organic affection of the Brain or on syphilis, we need not expect much relief from the errhine medecines — In the Gutta Serena from lead the errhine medecines may do good — This disease sometimes comes on very suddenly and here Mercurial snuff with setons have given much relief — Writers says that in Gutta Serena the iris is immoveable and the pupil does not contract - this I am certain is an error, for the Iris will mostly contract and dilate as it is affected with more or less light —

Mineral Errhines - we have yet discovered but few mineral errhines — The Turpeth Mineral is the most important one — I have seen the Turpeth Mineral with snuff induce salivation — A solution of white vitriol and water is a good Errhine — the vapour of Quick Lime produces sneezing —

Vegetable Errhines - The Beet of our gardens is an Errhine and has been used for various affections as tooth ache &c — The Asarum or Asarabacca is an Errhine - this is one of the most convenient of the vegetable errhines —

Asarum is the basis of a Pulvis Sternutatorius mentioned in the Edinburgh Dispensatory — it is found in various parts — its common name is Coltsfoot —

Phytolacca or Poke is a good Errhine —

Tobacco is a good Errhine as you all know — in a moderate dose Dr Cullen says it is very good but he Dr liked his snuff but too well — I think persons of a plethoric habit who have been in the habit of using snuff, should not leave it off directly — I know some persons who cannot take a large pinch of snuff without being affected with sickness of the stomach — Dr Cullen says he has found Dyspepsia produced by the frequent use of Snuff — Hysteria has been brought on by using Snuff — Maniacs are often fond of eating Snuff — I conceive the practice of Snuffing to be one of the most dirty, preposterous habits ever in use — The snuffs now in use contain not only Tobacco but also Sal. Ammoniac and Potash — and sometimes powdered Glass —

Febry 16th 1810

The powder of the leaves of Digitalis is an Errhine — The Euphorbium of the shops is an acrid errhine medecine — it is said to produce hemorhage in most cases — The white Hellebore is used as an Errhine — Euphorbium has been said to remove Cataracts; this has been aspected by Mr Boyle — I refer you to Bradley's Med & Phys Journal — The white Hellebore which I have mentioned as an Errhine is a native of our country — The Mexicans have an errhine of great powers — The Helianthus Autumnale is a very common plant in the United States — it flowers in August — it is an errhine

This weed exerts most powerful errhine properties — its odour is agreable — I think these medecines are too much neglected by physicians — I have found them of service in Gutta Serena & deafness — I think the use of errhines is a natural practice —

Sialagogues — these secrete saliva — they are either external or internal — the external are certain acrid articles which are applied to the inside of the mouth and stimulate the excretory ducts — they act somewhat like errhine medecines — a great many acrid substances applied to the tongue excite secretion of saliva — The sialagogues are much allied to the Errhines — the errhine Snuff Mineral & Snuff often salivates — The Pyrethra or Pellitory of Spain is a sialogue when applied to the tongue — it relieves toothache — the powder of this plant applied to the nose excites a discharge from it — it is a very acrid plant — it has been given in Epilepsy in Britain with advantage — Tobacco when chewed often salivates — it has been found useful in Scurvy — The Imperatorium or Master wort is a sialagogue — Camphor taken into the mouth excites a great flow of saliva — Dr Cullen says fresh horse Radish is a good external sialagogue — The Xantoxylon is a powerful sialagogue — it is an American plant — The salivary powers reside in the Bark and berry It has been found good in Tooth ache — the Indians use it in Syphilis — the Xantoxylon in Rheumatism is a good medecine — from this plant Camphor is obtained — the Polygala Senecka of Jamaica is a powerful sialagogue — it might be used in Rheumatic Tooth ache —

Internal sialagogues —

Mercury — is used in Fevers. I would observe that the practice of Mercury in Fevers is ancient —

Mercury — has been used 200 years ago — in 1701 this medecine was employed in Tertian fevers — I believe that Mercury rarely cures an Intermittent fever — it only prepares the way for the use of Bark or Arsenic — It should only be used as an auxiliary — but it may be used in Remitting fevers — the salivation often makes a permanent impression on the disease — Mercurial medecines are used in yellow fever — but I will not say much of it — in all the cases I have seen I never saw a patient die of yellow fever where a salivation took place — since 1790, Mercury has been less trusted to in yellow fever — there are some persons whom no quantity of Mercury will salivate — Mercurial Medecines have been used in Dysentery — there is no writer who has urged it so much in this disease as Dr Clarke (dec'd) — when the mercury excited a salivation it generally cured the patient — he combined Calomel with Ipecacuanha in this disease — I have seen mercury do harm, but it is certainly a good remedy — if the mercury does not produce good effects in a few days, lay aside the medecine for it will do harm to your patient — I believe that the use of Mercury in Dysentery is a very nice and precarious medecine and I hope you will never use it except with great caution — I have seen it prove fatal — I shall hereafter be more sparing of the use of mercury in Dysentery and shall never use it without great care — In Dysentery combined with Scurvy, the use of Mercury is a bad practice — Mercury is often employed with advantage in Diarrhoea — it is most useful in the chronic state of diarrhoea — I have found blisters of service in this disease — the use of mercury in such diarrhoea is less ambiguous I hazarded than has been supposed — Mercury has been used in Consumption of the lungs I have never cured it with this medecine — I have seen it give relief — I have found the Mercurial plan less useful than any other plan —

℞ Carbo sublimati 25 grains

Aqua 3 ℥ 8 onces

℞ quinze ou vingt gouttes dans
un verre de Cerise

some Physicians have found Mercury good in Pulmonary Consumption – Mercury was used in this disease in the case of King William – and it was used in the same disease 40 years ago by Dr Bond –

Feby 19th 1810

Mercury has been long employed in Cynanche Tracheales – it has been generally used to create a salivation – I have used Calomel with Ipecacuanha in Scarlatina – I have been informed that this disease has been treated with gargle of corrosive sublimate – The Cynanche Tracheales is a disease in which mercury has been used – Calomel has been employed in this disease – I have seen the disease terminate in 24 hours – some physicians have advised Mercury to in order to Salivate – but in children, this is almost impracticable – I have used Turpeth Mineral in this disease with advantage – Of the use of Mercurial medicines in Rheumatism I have not much to say – I have used Mercury in this disease combined with Guiacum – The venereal Rheumatism is best managed by mercury in union with Opium – I have generally in such cases given Mercury and at the same time Dover's Powder – In Rheumatism of the Intermittent form, mercury is sometimes used – We are often called to patients with Rheumatism brought on by nothing else but the suppression of Gonorrhoeal Pains – when the Gonorrhoea returned the Rheumatism retired – These cases should be treated with Mercury – as far as I know mercury has been little used in Gout Dr Heberden has often used Mercury with Opium in Gout – We seldom think it necessary to use Mercury in Pneumonic Inflammation – but there is a Pneumonia of low nature found arising from the same causes as Intermittents – This may be treated

with Mercury + Hepatitis arise from the same cause, as those which produce Intermittents — bleeding, blistering &c may be employed — Mercury is much used in this disease — The use of mercury in this disease is established — as soon as the mouth is made sore the mercury may be laid aside — if the pain be severe, bleed and apply a blister to the side — I never saw mercury cure except it salivated the patients — This disease is certainly inflammatory in the first instance and here I think Mercury should not be used — the system should be reduced by bleeding before we salivate — In Goitre or Bronchocele, mercury has been much used — and this medecine has certainly cured in some cases — in some persons the mercury has only retarded the progress of Goitre but not removed it — I shall say something of the use of Mercury in Dropsies — the use of Mercury in this disease is an old practice — mercury is an ambiguous medecine in Hydrocephalus internus — it does not cure more than two cases out of twenty — a number of remarks on Mercury in this disease &c &c — Mercury is used in Epilepsy, but it seldom cures — I never saw it succeed in this disease — In Tetanus, our medecine has been used in form of friction over the whole body + mercury has cured this disease — I have seen it succeed in Tetanus —

In Gutta Serena

℞. Aqy. Mur Hydrargyri gr. ij - Vitriolic Ether ʒij - M. - dose X drops 3 times in die -

— February 20th 1840 —

Hydrophobia has been cured by the use of Mercury in many cases — there is much fallacy attending the majority of cases in which patients are said to labour under this disease — I do not doubt that mercury has cured and prevented the disease — the great difficulty is to excite a salivation in all cases and to regulate it as we wish — the effects of a bite of a mad animal do not always appear soon, they sometime remain 40 days without coming on — I believe it is best to use mercury internally and externally at the same time — I think it is best to bring a great irritation of the mouth about the time at which we expect to see the symptoms of hydrophobia —

Mercury has been used in cases of bite of snakes — In constriction of the Oesophagus, mercury has been used with great advantage — In Hypochondriasis, our medicine has been employed with success in many cases — the Mercurial preparation that has been found most advantageous in this disease is the Pil. coerule — I wish I could inform you of the success of Mercury in Mania, but of this I have little or nothing to say — In various Paralytic affections, mercury has been employed with advantage — In Palsy succeeding to venereal disease, mercury has been much employed — In Rheumatism, Mercury has been used — In Colica Pictonum, our medicine has been very useful — Dr Clarke has given ℥ss Calomel in 24 hours — I refer you to Bradley's Journal — In this disease Mercury has been used not only to purge but to salivate — I have used Mercury in this disease in the Penna. Hospital — Mercurial medicine have been used in Gutta serena — sometime this disease depends on Syphilis — Mercury appears well adapted to this disease — The Oxy. Muriat Hydrargyri or Corrosive Sublimate has been employed in this disease — ℞ Oxymur Hyd. gr ij. Vitriolic Ether ℥ij M. dose ✗ drops 3 times in die in a cup of warm milk —

In Gonorrhœa –

℞ Calomel grs. xx Pulv. Gum. Arab. gr. ij – Pulv. G. Arabici ℥ ij – tere et adde aquæ ℥x Mft. Injectio –

* who in the Devil cares what he does believe

* what in the devil is that? it belongs to horses
don't it?

Great caution is always necessary in the administration of Mercury — Some cases of Deafness are successfully treated by Mercury — In some cases of Scrophula the use of Mercury has done much good — I believe from observation that many cases of scrophula depend on and are connected with Syphilis — and in these cases Mercury is advantageously employed — The strumous tumors in the neck of children have been treated by Mercurial ointment — In the open Scrophulous Ulcers, I believe there is no better application than the N. Nitrat. Hydrargyri Rub. — Cancerous affections have been cured with Mercury — A late writer has said that Mercury is best used in Cancers after an operation has been performed and unhealthy granulations have arisen — I have used Mercury internally and externally in Cancerous like ulcers with some success —

Of the use of Mercury in the Venereal disease, I have little to say, because this subject is treated at large in books — I do not believe that chancres have ever been cured by any medicine but Mercury — some medicines may palliate, but this remedy is the only remedy for confirmed Syphilis — With respect to Gonorrhoea, this medicine is little used — I do not believe the matter of Syphilis and Gonorrhoea to be the same — I have used injections of Mercury in Gonorrhoea — ℞ Calomel ℥ss grs ℥ opii grij Gum Arabic ℥ij rub them together and add aqua ℥x — M. ft Injectio — I have used injection of Corrosive Sublimate, but the Calomel injection is better — Some writers say that in attempting to salivate Syphilitic patients it is best to carry the use of the Mercury no farther to effect the mouth.

In Frambesia; this medicine has been used in this disease — it is called by some Yaws

Of Lepra, I can say but little — I have seen but few cases of this disease —

Some Physicians appear that Lepra has been aggravated by the use of Mercury — The preparation of Mercury most likely to do good in this disease is the red nitrate of Mercury — In Psora or Itch, a solution of Muriate of Mercury in Lime water has succeeded — this solution is called Aqua Phagedenica — I have found the Ungt. Hydrarg. Nitrat. of advantage in this disease — The Linea Capitis often refuses to yield to Mercury — this disease has yielded to the common Laurel of our Country — this medicine taken internally produced a remarkable effect in this disease in many patients in whom I have tried it — I have used a wash externally composed of the Laurel or Kalmia — A disease of the Skin often remains a long time after the application of blisters — this is well treated with Aqua Phagedenica — The Rus Radicans or Sumac when applied to the Skin brings on a peculiar disease — it appears in the 9th day after the application of the poisonous vine — The best remedy for this is the Sublimate Corrosive dissolved in water or Lime water — it always acts in curing the disease speedily — I can cure this disease in myself in 48 hours with this medicine — I believe that mercury destroys the susceptibility of the system to this disease — I generally use about 4 grs of Corrosive Sublimate to 8 ℥ of water —

The disease called Formicatio pungens or Itching is cured by Mercury — I never advise the curing of this disease in arthritic patients —

Plenks mixture

℞ Mercury crude ℥i. G. Arabic ℥ij. Aquæ ℥iij rub together
add Simple syrup ℥ss. Aqua ℥viij. — Dose ℥ij —

Feby - 22 1818

Mercury in a pure state is quite inert — it has been employed to act by its weight and slipperiness — Mercury in its crude state may have some effect on the system — In order that this mineral should become active in the system it should be chemically prepared — Pure Quicksilver when agitated with distilled water changes the colour and properties of the latter and renders it a medecine of some activity — The water thus prepared has killed worms & leeches &c — The Fumes of Mercury received in venereal ulcers have been very useful in healing them — The smoke of Cinnabar, a sulphuret of Mercury are used for this purpose — but I have never used these fumigations. — Dr Cullen says this practice is attended with some hazard —

The preparations of Mercury formed by trituration with powders are always milder than those prepared with acids — The Blue Pill is an excellent preparation made by triturating Mercury with Rhubarb or something else until the globules disappear — I think this the most manageable of all Mercurial preparations — Some have supposed that this Blue pill is not as well adapted to the venereal diseases as the saline Mercurial preparations — venereal sores often refuse to yield to the Blue Pill even when a salivation has been induced — it is best always to change the preparation of Mercury — Mr Plenk of Vienna has recommended a mixture of Quicksilver and Gum-arabic — ℞ Mercury ℥i — G. arabic ℥ij — ℥ij aqua and then together — add ℥ss Simple Syrup

aqua ℥ viij (Aft Mixture the dose is ℥ij —
He directs another mixture made with Yolk of eggs
instead of Gum. arabic — This is an important
local application — it is good in Venereal sore
throats — it has this advantage that it produces
a salivation very soon — Yet I believe this prepa-
-ration is little used — Quicksilver rubbed with
hogs lard and a portion of suet forms the
Mercurial ointment in use — It was formerly
a practice to add Turpentine or Bals. Copaiva to
the Mercury to unite it with the lard, but this
a bad practice in some cases, though in old
Cancerous sores, I think the Turpentine is a good
addition — but it always creates inflammation
on the Skin — The Suet is added to make the
preparation of a good consistence — A writer has
directed ℥i of rancid sweet oil to be mixed with
℥iv of Mercury and then to add the lard — D. Leake
used to put a quantity of Mercury into a Stop-
-pered bottle with sweet oil rancid or not —
shake the bottle a few minutes and then rub it
in a mortar for a minute, and the preparation
is finished — mercurial ointment applied with-
-out friction is unavailing —

The Calcined Preparations of Mercury were
formerly thought to be the best — The principal
preparation is the Mercurius precipitatus per se —
This preparation is formed by a great quantity of
oxygen being absorbed — This acts as an alterative —
I think the Hydrargyrus Nitratus rubber induces
a salivation sooner than any other preparation &
I think it best adapted to old venereal Ulcers —
This is a very active preparation —

Sub-Mur. Hydrarg. et Ammoniæ
or
White Precipitate is made by
precipitating mercury from its solution in Aqua Mur. Hyd.
by means of a solution of Murias Ammoniæ — The
add Solution of Carb. Potash to separate
part of the Mur. Acid —

It has advantages over Calomel & Sublimate because it is less likely to purge —

Saline Preparations — I shall first speak of those formed by the union of Sulphuric acid with Mercury — the chief of these is a Sulphate of Mercury called Turpith Mineral — This is an acid preparation and must be given from 1 to 4 grs — as an alterative ½ gr is a dose — this medecine was much used formerly as an alterative in Syphilis — Mercury readily unites with Muriatic acid and form Muriate of Mercury or Corrosive Sublimate — I have used Corrosive Sublimate combined with Opium and I think it an useful medecine — it is a good medecine in venereal disease in children — It is always best to begin with this medecine with small doses — a solution of Sublimate in Lime Water is a good medecine in Cutaneous Eruptions —

Calomel is an important medecine — it is a Muriate of Mercury with an excess of Mercury — I think it is less manageable as a salivant than the Blue Pill — but tis a good purge & sometimes a good salivant medecine — the combination of Mercury with Nitric acid forms some good medecines — one is the Mercurius Nitrates Cinereus — it is made by dissolving Mercury in Nitric acid and precipitating the Mercury by means of Sal. ammoniac — An important preparation is made called the Ung. Hyd. Nit — or Citrine ointment — It is good in Cutaneous Eruptions — a new preparation is made called the Mercurial Soap — The Hydrargyrum Phosphoratum is of late much noticed —

In old syphilitic Ulcers

℞ Phos. Hydrargyri gr. iv. Pulv. Cinnamon gr. xiv Sugar gr. xxx
M ft dos. viij – one tube taken a mane et nocte –

* it is no "fact" at all, because it is not proved

This Phosphate of Mercury has been much used in old Syphilitic Ulcers — It is a very active medicine — it creates Nausea — ℞ Phosphat Hydrargyr 18 — Pulv Cinnamon 14 grs — Sugar 30 grs — divide into dses 8 — one to be taken morning & evening until it salivates — French Physicians are prejudiced against preparations of Mercury in Nitric acid — they say it destroys the constitution — Keyser's Pill is a Mercurial preparation — it is an acetate of Mercury — The Borate of Mercury is never used in practice —

Modus Operandi of Mercury — The old opinion was that mercury acted as an universal evacuant and cleared offensive humors out of the body — Dr Cullen believed the mercury to act as an evacuant and that it acted specifically on the salivary glands — Scheridan thought that the preparation of Mercury combined with the venereal poison and formed a neutral which was thrown out of the system — it is said that Chancre matter rubbed with Mercurial preparation destroyed the bad properties of the former but this is false — I believe that the Mercury is absorbed into the system &c — The last theory is that of Mr Jno. Hunter — he believed that Mercury acted by counteracting the venereal poison and producing a new action in the system — many circumstances tend to prove this fact — he believes that the Mercury irritates the part already irritated but that the irritation of the Mercury counteracts that of the venereal virus and a new action takes place by which the disease is cured — an objection to this is that other irritants as Copper &c. ought also to cure the venereal disease —

Yes! just as natural as to shit at the umbilicus

* why are we not like what it really is — as inertia motion that's certain; but why or wherefore?

I believe that this is the most plausible theory but it is attended with many difficulties — Refer you to Dr Adams —

Feby 23 - 1810

Emetics — There are such medecines as throw up the contents of the stomach — this is an important class of medecines — they are among the first which were ever used — I do not believe that they are too liberally employed by physicians — vomiting seems to be a natural remedy — many animals relieve themselves from disease by casting up the contents of the ~~bowels~~ stomach — The Horse cannot be made to vomit; his ~~an~~ inability to vomit is owing to the peculiarities of his stomach — some Physiologists have thought that the stomach is passive under the operation of an emetic — this was Dr Cheyne's notion — some have said that the motion of the stomach depends on the action of the Diaphragm &c — when noxious matters exist in the stomach, emetics are certainly indicated — The mere evacuation of the stomach is not all which emetics effect but a part of the duodenum is also evacuated — this being the case a quantity of bile is often thrown up in the act of vomiting — vomiting excites the force of the circulation throughout the body — but this increase of circulation is not often lasting — the system is generally left in a more languid state — I cannot see why emetics are so much objected to in diseases — but more of this hereafter —

Dr Robinson supposed that emetics occasioned a constriction in the fibres of the body — Dr Cullen says owing to the consent between the stomach and

& so it is — That there is an inate preservative power in the Animal fabric is as evident to observation & experience as any fact whatever, this may be called vis med. nat. or any thing else expressive of the intended meaning, but such a power is present, & he who denies it might as well deny he never has an appetite to eat or in short that Daddy Cullen did not know more about it than any body else which he certainly did.

what is it heals a wound? what covers the suture in the cavity of the intestine to be discharged per anum —

Skin the action of the vessels of the latter is excited — After taking an Emetic the stomach remains quiescent for some time — in a few minutes nausea comes on and goes off — then returns — the eyes become languid — vomiting comes on — the face is red — sweat breaks out — pulse is increased — there are mostly two or three attacks of vomiting — when the latter goes off — patient feels languid and drowsy and the pulse grows weaker — Some persons believe that when emetics are taken into the stomach the vomiting excited is an effort of the medicatrix natura to throw off the noxious matters — All emetics are certainly not deleterious as some have said, for there is nothing injurious in warm water which always acts as an Emetic — it is deleterious or would not be rejected —

Fevers — The use of Emetics preparatory to Bark has been long known — they are something well fitted for this purpose — Alexiate and habit influence the action of Emetics on the system — It has been said that vomits are preferable to cathartics in summer — It has been disputed by medical men whether vomits are safe where there is a determination of blood to the brain — I think they are unsafe in such cases — but even to this rule, there are some exceptions — I have never known death from sea vomiting — In Epilepsy these medecines are much used — I have employed them in this disease and found them useful — In Apoplexy depending on fullness of the stomach emetics may be found advantageous —

Emetics have been much recommended in Hydrocephalus

& vomiting always comes on almost spontaneously in this divan

Hydrocephalus always depends on fever and perhaps emetics may be useful; but I have never resorted to this practice — Emetics have been advantageously employed in Acute Rheumatism — I believe that one of the best means of curing rheumatism of marshy countries is by emetics — Inflammatory Gout has been successfully treated with Emetics — a spontaneous vomiting has given great relief. In the Sick Headache, nausea and sometimes vomiting does great good — I generally use for this purpose Ipecacuanha — I think it an excellent practice in women who are affected with arthritic symptoms — I do not know that I ever employed emetics in Ophthalmia — but they have been used in this disease — the Tart. Emetic is resorted to — Emetics are often useful in the tardy Eruption of small pox — they are also useful in the latter stage of this disease when there is a great deal of mucus in the lungs — In the hoarseness succeeding to Measles, Emetics are useful — Emetics are used in Pertussis or Hooping Cough — they cannot be used easily in children — In Dysentery, the Antimonial Wine has been used — In some cases of Diarrhoea, the vegetable emetics may be found useful — I have no doubt that this disease might often be treated with success by emetics — Diabetes has been cured by the use of Emetics — Emetics are seldom used in Dropsy — but they may do good in some cases — In Anasarca succeeding to Remittent emetics may be found serviceable — I have used the Sulph. Hydrarg. to excite vomiting in this disease, with success —

+ Scant Merchandise –

Emetics have been found beneficial in Jaundice — they are most serviceable when the disease depends on Gall Stones — In Genuine Pneumonia, we seldom give these medecines — bloodletting is the great remedy, but Ipecacuanha is sometimes a good medecine in this disease — In Asthma, emetics have been used —

Phthisis Pulmonalis has been treated by the use of Emetics with great advantage — In the disease of Cynanche Tracheali, we frequently use Emetic medecine — I prefer Ipecacuanha to all other emetics in this disease — In Cynanche Maligna, I have often used Sulph. Mercury and also Ipecacuanha, but I prefer the former — other emetics are also used — to an adult I give 4 or 6 grs of Sulph Hydrarg — the effect is certain and immediate — to a child of 4 or 6 years old give 2 grs — to children under 4 years give 1 gr or 1½ grs — I have never given less than one grain — It is an article of infinite advantage and is easily managed — In Mania, we often employ emetic medecines — the nauseating plan may be carried on for a long time in some cases — I have been it do much more good than large bleedings — In robust Maniacs the strong emetics are best — in weak persons use the Ipecacuanha — In paralytic Affections, emetics are frequently resorted to — In puerperal fever emetics are highly recommended — some persons depend on these medecines entirely —

February 26 1810

Emetics have been successfully used in Hemorrhages of red blood - Dr Bryant says they are excellent remedies in Hemoptysis - Nauseating medecines have been found useful in Uterine Hemorrhages - In Dyssentery some physicians have used Ipecacuanha with great advantage - also in most other hemorrhages as Menorrhagia - Bergius used 1 gr of Ipecacuanha with sugar in Uterine Hemorrhages, and found it very serviceable - In the Micturitions and Hematuria, the Ipecacuanha has been employed with success - in Hemoptysis this vegetable emetic has done much good - I have not had much experience with the emetic in such diseases - I have used Ipecacuanha in some cases, and think it the best medecine we can use, except it be the Sacch. Saturni - I give this Emetic (that is the Ipecac) in small doses - Is not the sickness and nausea which attends pregnancy, a kind & wise provision of Nature to prevent violent hemorrhages from the Uterus? I think it is a reasonable hypothesis. I believe that Ipecacuanha is possessed of a highly relaxing or antispasmodic quality - I am sure that this emetic does not act in hemorrhages by the sweating it accasions, else other sweating medecines should also cure hemorrhages - Ipecacuanha in uterine hemorrhages acts by translating excitement from the uterus to the stomach - the powers of the Acet. Plumbi are much increased by adding a portion of Ipecacuanha - though the lead is mostly the best medecine in hemorrhages yet Ipecacuanha is sometimes the most proper medecine - I have little or no ~~use~~ experience in the use of Emetics in Incarcerated Hernia -

* that "use is attended with great advantage" yet the "Emet is plus is not proper" — that is new logic —

* I wonder how that would be proved? I don't believe it —

Curcuma ~~Longa~~ or Turmeric is a valuable Emetic — X

Sanguinaria Canadensis or Puccoon — Natural —

But a famous Surgeon Richter cured a violent case of Incarcerated Hernia by the exhibition of small doses of Ipecacuanha — The Swelled Testicle or Hernia Thuinoralis, the employment of Emetics is attended with great advantage — I believe that this disease is seldom attended with a venereal taint and I believe the emetic plan is not very proper — the disease may be cured easier by bleeding, blistering cold water, glauber salt &c — Emetics are seldom employed to discuss venereal Bubo, but they have sometimes done much service and even sometimes succeed in removing the swelling — Bubos have been discussed by the Nausea Mannâ or Sea sickness — I believe Emetics cure Bubos, by stimulating the absorbents — The bites of Snakes have been cured by the use of Emetics!! In case of Strangulation, the use of Emetics ~~are~~ is very ambiguous, but it may sometime be proper — Chlorosis has been treated with Emetics — The Anthelmintic properties of Emetic medecines having been known — I do not think they can be serviceable except the worms be in the stomach —

Of Individual Emetics

Vegetable and Mineral Emetics — of all the vegetable emetics the most important is Ipecacuanha — this was unknown to Sydenham — it is a native of Brazil — it has been thought to be a violet, or convolvulus — but it is the produce of a Brazil plant called Caliport — The active part of the plant resides in the Bark — it does not give quite as much stimulus to the stomach — but it is the safest and most manageable of all the emetics in use — this article is employed in powder, wine, decoction, infusion, &c — The formula of the London Dispensatory for making the ~~Antimonial~~ Ipecacuan. wine is the best — The dose for children 5 or 6 months old is 60 or 70 drops — it seldom operates more than once — it is a certain Emetic — one grain of the

* Dysentery is spelled wrong all throughout this book —

~~In Dysentery~~ Dysentery

℞ Pulv. Ipecacuanhæ ℔ss xij Pulv. Gummi gr. xij Cretæ ℔ss XXIV —
~~m~~ ft. doses viij —

powder will create nausea and sometimes actual vomiting — this accounts for the small doses formerly mentioned as used in Hemorrhages — In general the Ipecacuanha which is brought to us will not prove emetic in a dose less than X grs and sometimes XII grs — Ipecacuanha has been successfully employed in Intermitting Fevers — There is no disease in which Ipecacuanha is more used than in Dysentery* — the infusion is generally employed — it never occasions that debility which follows the use of Tartarized Antimony — I have found Ipecacuanha to be an excellent medicine in Dysentery* — I think it is one of the best remedies in this disease — my method of employing this medicine in this disease is ℞ — Ipecacuanha 12 grs — Opium 2 grs Creta 24 grs — Ten ft doses viij — I do not know that the Creta is any addition to the virtues of the medicine — The Ipecacuanha is often employed with Opium only & with great advantage — in this way the late Dr Church used the medicine in Dysentery* — Dr Chisholm found the combination of Ipecacuanha & Calomel very beneficial in this disease — I think the Ipecacuanha is best adapted to Dysentery in which there is considerable hemorrhage — I do not think the formula mentioned would be very serviceable in cases attended with discharge of Cebella or feces in lumps — I think the cure of Dysentery* by Ipecacuanha does not at all depend on a purgative operation — In acute Rheumatism we use Ipecacuanha in form of Dover's powder — In Dropsy this medicine has been found highly beneficial — especially in Anasarca — the Ipecacuanha employed so as to keep up nausea has done much good in Phthisis Pulmonalis — I commonly combine 2 a 3 grs of Ipecacuanha with 4 a 5 grs of Creta — I give this 3 or 4 times in die — I have found this medicine very serviceable, but I cannot say I have cured with this medicine —

In Asthma the Ipecacuanha is used — consult Dr Akenside — the author says no medecine removes the spasm as soon as this ~~medecine~~ — he gave 3 or 5 gr every alternoon in chronic cases — his patients were at first nauseated but they soon became habituated to the medecine — In the Humoral asthma, our medecine has been found very serviceable — an emetic given in the paroxysm affords great relief — In Confluent Small pox, I have given large doses of Ipecacuanha with manifest advantage — The smell of this medecine always produced violent asthma in a pupil of mine now a Dr Jones of Maryland — In Colica Hepatica as it is called, the Ipecacuanha has done good — it discharges gall stones in many cases — The Ipecacuanha when ~~in~~ mixed with a few grains of Opium destroys the narcotic power of the latter medecine — I cannot explain the operation of the medecine in this case but it may be of great service in practice — it certainly lessens the narcotic qualities of Opium — Ipecacuanha is by far the best emetic for the expulsion of narcotic medecines from the system — Spiraea

Spiraea Lupoliata is a native Emetic — the root of this is ~~somewhat~~ somewhat like the Ipecacuanha — the emetic property resides somewhat in the leaves & stalks — it is used in the country in decoction or Tea — in this way, we are unable to say what dose has been taken — the best mode is to give the fine powder of the bark in substance — it is an article well worthy your attention —

this plant wants more elucidation

Omnis

℞ super sulph & supra gr viij —
aqua ℥ viij ter dose — ℥ every
15 minutes till it operates —

Omnis

℞ super sulph Zinci ℥ij: Rock alum ℥i Cochineal grij
aqua bullientis pint i ter dose ℥ss —

Tobacco is an Emetic of great efficacy — externally applied to the stomach it produces powerful effects — The Squill is an emetic of importance — but it's also a diuretic — it is the root we employ in about 4 grs. when dry — when recent 20 grs are a dose — some of the Siliquose plants are Emetic — as Horse Radish or Mustard infusion — these act very powerfully in removing narcotic matters from the stomach — a weak infusion of these articles restrains vomiting but a strong infusion is a certain emetic These are the principal vegetable emetics — I would recommend to you the investigation of the violets

Mineral Emetics — Super Sulph. Cupri — or Blue vitriol is an emetic medecine — 2 grs will generally puke — caution is always requisite in the exhibition of this medecine — it sometimes vomits gently but often with severity — This article has been used in S. Carolina in Cynanche Trachealis — we are told that it is the best emetic in this disease — dissolve 8 grs in 1/2 pint of water and give a child a tea spoonful every 15 minutes until it operates — Most if not all of the saline preparations of Mercury when taken largely may be made to act as an emetic — The principal of these is the Sulphate Hydrargyri — I think it one of the best emetic medecines in our possession — 5 a 6 grs for an adult 2 a 3 grs for a child — I have used this emetic with Squill in dropsical cases — this combination makes a good medecine — The Super Sulph. Zinci is an emetic which acts suddenly — I think the Ipecacuanha is a better emetic — The following is Dr Mosely's formula ℞ Super sulph. Cupri ℥iij. Rock alum ℥i Cochineal grs iij Aqua bullient 1 pint M — dose ℥ss — This is the Vitriolic solution —

Jameses powder is a Phos. Calcis et Antimonii —
This has been called an antimonial powder — but the powders of this name no in use are made a bolus — ℞ Nitras potassæ ℥j Antimon.
Tartarisat gr i Sub-mur. hydrarg. ~~gr xx~~
gr viij — M ft pulv viij —

I have used this solution in Phthisis Pulmonalis — this disease has been relieved by the vitriolic solution but I never saw Hor Glove do much good — The next emetic is Tartar Emetic — It is best to divide a few grains in a quantity of water and take a spoonful every 15 minutes until it pukes the patient — the practice of aiding the medecine in action, by the use of warm water is well known — Hermes Mineral is an antimonial Emetic of some importance — it is used in Hydrothorax — The dose is 2 grs — The Vin. Antimon is well known to you — This is a proper place to speak of James fever powder — it has been used in Remittent and Intermittent fevers — the dose is uncertain — 12 grs are known to sweat purge &c and often ℥ss was requisite — the average dose should be about 5 grs —

Cathartica are such medecines as excite an evacuation by stool — they exert a decided effect on the fullness and frequency of the pulse and the heat of the body — they are indispensable in all Fevers — sleep often follows the operation of cathartics when well managed this is an evident effect on maniacs in an Hospital — they effect the mind considerably and a close attention of the mind to one subject delays the operation of cathartics — I venture to say that ℥j of Jalap would not operate on Bonaparte if he were to mount his horse and march at the head of his army to commence a contest which was to decide the fate of his Empire — the dose of cathartic medecines is very variable — the same dose of purgative medecine will affect the same person differently at different times — obstructed perspiration often produces purging — cold to the lower extremities is often a powerful purgative — this is particularly the case in delicate women and arthritic men — I have found great advantage from the affusion of cold water on the extremities of patients in Colica Pictonum —

+ read him on everything, whenever you can feed him read him — he treats every subject with a great deal of learning, a sound judgment & with all a modest diffidence — Dr B. with all his Mat. med. Bot. & Nat. Hist. is cakes & gingerbread compared with Cullen —

Rheumatic mixture

℞ Olei Ricini ℥ij — Pulv. Gralici ℥iij Sugar ℥ij Aquæ ℥vj
Mft mixtura — dose ℥ss 3 or 4 times in die —

+ of China —

Rhubarb gripes less than Jalap — I mostly combine Calomel with it — I use Rhei 15 gr. Calomel 4 gr. — the purgative quality of this article is attended with bitterness and this renders it somewhat tonic — some deny its astringent quality but this is not correct — it seems to pass by the kidneys and colour the urine — it acts in some cases as a diuretic — Rhubarb is one of those medecines which is absorbed into the course of the circulation —

White Walnut is somewhat like Rhubarb — it is obtained from the inner bark of our Butternut — it acts early on the stomach and does not gripe much — when well prepared it operates in the dose of gr. 8 — this article has been called a narcotic but I never saw this quality in it — it is admirably adapted to Dysenteria — the bark may be dried and powdered and this powder operates in 20 a 30 gr. — it is known by the name Juglans —

Jalap is a native of South America — the medicinal activity resides in the resin — the gummy part is not cathartic but diuretic — Cullen says that it operates better when triturated with Crem. tart or sugar and in this way children take it — I do not agree with Cullen that Jalap is proper for children — I know it to gripe more when combined with Crem. tart — I always combine it with Calomel — the powder of Jalap operates in dose of 15, a 20 gr. — this preparation of Jalap is the best — 2, a 3 gr. is a dose for children but I do not give it to them — the Ext. Jalap is used in practice — it is an anthelmintic medecine especially when combined with Calomel —

May Apple of our country is a purgative —

+ do you mean the Fruit or the Root? the manner of preparing these articles & the parts used are not designated —

+ perhaps — you would dry it first —

+ East Indies

+ In Syria

it is best to combine it with Calomel — it is one of the best Cathartics in Autumnal Fevers — I have used it with Cream-tart — the May apple is suited to the Intermittent fever — the dose is about 15 or 20 grs — this dose operates more than the same quantity of Jalap — it is less likely to prove Emetic — the article should be taken up in the time that the apple is perfectly ripe — the root may be then taken up and rubbed into a fine powder* — the root is agreable to many and injurious to none — an Extract is obtained from the root and it is a good Cathartic —

Helleborus Niger grows in the mountainous parts of Germany — for an adult the dose is 15 or 20 grs — the ancients used it as a purge in Melancholia —

+ Gamboge is an important Cathartic — it is obtained from various vegetables — it is best used in form of pills — I have never known it to prove Emetic as much as Jalap — it often purges in doses of 3 or 4 grs — it is a very active article

Aloes is a gum resin of a black colour — it is the produce of a vegetable — it is an important cathartic —

+ Scammony is the produce of a species of Convolvulus — the dose is from 8 to X11 grs — it is triturated with Sugar &c —

Colocynth is an acrid Cathartic — the dose is from 4 to X grs — it irritates the intestines violently and sometimes produces bloody stools and convulsions — it is a most violent purgative and is used in France to cure Syphilis — women have purchased it to produce abortus —

Sulphur is used as a Cathartic medecine —

* Digitalis does not produce frequency of the pulse
it has exactly a contrary effect —

* just [illegible] it gives [illegible] it !! —

it is a mild purgative and is well adapted to delicate habits — the objection to it is the disagreeable feter which attends its operation — the principal neutral salt, is Glauber's salt — its dose from ℥ss to ℥j — it is a good Cathartic — Sulph. Magnesia is seldom used — Sulph. Potash is less often used by us — the French employ it in practice —

Diuretics — are such medecines as act on the urinary system, promoting the discharge of urine — and are compelled to use them daily —

Seneka in the root or infusion is an useful diuretic — it is useful in Anasarca — it may be given in large doses — it is attended with considerable acrimony in the mouth and fauces — it is best to prescribe the powder in dose of ℈ss 3 or 4 times in die — I use a saturated decoction or tea of the article — Polygala Senekas is the ~~name~~ name of this article —

Digitalis or Fox glove is used as a Diuretic medecine — it is narcotic and as great a stimulus as Opium — whether in powder, infusion or decoction it produces fullness, & lessens frequency of pulse — a glow in the countenance, burning in the hands &c — in Epilepsy it has been used — in Phthisis Palmonalis it has been employed and does good in keeping down the pulse — I have seen it do infinite mischief in Hospital practice — I am willing to give up its use till I have tried other articles — I do not think it is a good medecine in Phthisis — I have used it in acute Rheumatism — I combine it with nitre — it is a good medecine in Dropsies — I refer you to Dr Withering's book on this subject for further information —

It has done good in Hydrothorax combined with Squill — The best mode of giving Digitalis is the powdered leaf — give ½ gr at first 3 or 4 times a day — it may be used in decoction — I combine the powder with Opium and think it is improved in this way — it is sometimes combined with Calomel — if it does not produce good effect in 3 or 4 days, the medicine is not good — while this medicine is used in Dropsies the patient should drink freely — it seems to do little good in Ascites — in Hydrocephalus it has been used — when we use the Tincture, begin with small doses — this medicine is used in suppression of Urine — I have employed it with advantage — it is also used in Dysuria —

The Common Tobacco of our country is a diuretic medicine — I refer you to Dr Fowler's book — I have not had much experience in the use of this medicine — the Tinct of Tobacco has done great good in Dysuria and total suppression of Urine — an Infusion of the tobacco is also used — it is made by infusing ℥j of Virginia tobacco in ℔j of water — give 15 drops at first gradually increasing —

Squill is a good diuretic — the root is employed — to an adult give 1 — 3 gr 3 times a day — it is a very acrid medicine — I use it with Calomel or Sulph. Mercury — the article is often obtained in an imperfect state — it does little good in dropsy except it acts as an Emetic — this article is highly stimulant and must be used with great caution — in Ascites, this medicine is used with advantage — I sometimes employ a Tincture made by mixing the powder of Squill with Ether —

Calchicum or Meadow Saffron is a diuretic medicine —

Opium is often diuretic —

Artichoke is also a diuretic — Helleborus Niger is diuretic —

The Siliquose plants are diuretic – as Horse Radish –
The Alliaceous plants are useful in Dropsy –
The Coniferous plants are diuretic – Balsam Copaiva
is also a diuretic – Some of the Neutral salts are
diuretic, so are the Cantharides of the Shops –

March 2d 1840

Antilithics are such medecines as prevent the formation of calculus or relieve the symptoms of this disease — many of the bitter tonics possess this property — the bitters without astringency as Anapia Centaury, Camomile, & Menthes are possessed of the property of alleviating the pains of calculi — The Arbutus Uva Ursi is an astringent medecine and has been used as an antilithic — The leaves are the part employed — they may be used in substance, decoction or tea — I think from experience that it is best adapted to Nephritic Gout — The dose is 6 or 8 grs every 3 or 4 hours — a large dose is ℥ss twice or thrice a day — this article certainly produces a great alleviation of the disease — this medecine favours the expulsion of calculi — I have known this to be the case — in Hematuria from disease of the Kidneys or bladder or from the indirect use of strong infections, this medecine has done much good — The use of uva ursi has produced Catarrhus vesicae — it has also produced stricture across the thorax — I do not however think there is a medecine which is more celebrated as an antilithic; that is a palliative of the pains of calculi — The Pyrola or Winter green has been used in this disease — Tea has been used as an antilithic — I have never used it — The Alliaceous plants are considered by some as palliative of calculus — Terebinthinates have been called antilithics — Muriatic acid is an antilithic in doses of 3 or 4 drops several times in 24 hours — Carb. soda has been used in Calculus —

Emmenagogues or Menagogues — such medecine as are said to produce discharge of the Menses —

Emmenagogues

Iron — Vegetable bitts

Camomile — Matrimony

Mercury — Camphor

Senecka — Sabina

Mentha Pulegium — Rosemary

aromatics — plants

The period at which the menses appear varies according to climate and other circumstances — heat seems to produce an evolution of the discharge — in some countries we are told that the catamenia does not appear monthly but once every 6 months — I refer you to Ruspean on this subject — The preparations of Iron are excellent Emmenagogues — they are of infinite advantage — I give the Rubigo Ferri with alcum Salinae — Camomile flowers have proved menagogue — all the vegetable bitters are also menagogues — the cold bath is well adapted to the Retentio Menses — a bath of brine or sea salt has been found very useful — well regulated exercise is necessary to the health of the Uterine system — the Marriage state is certainly a tonic in some cases of this disease — Mercury is useful no doubt in this disease — it is set down among Emmenagogues by writers on Materia Medica — Camphor is an active medicine and is an useful Emenagogue — Seneka snake root of our country is a powerful medecine and may be useful as an Emenagogue — Dr Hartshorne has used it with success in many cases — The Mentha Pulegii or Pennyroyal is used as an Emenagogue medecine — The Rosmarinus or Rosemary is an Emenagogue — Asafoetida and the allaceous plants have done good in Retentio Menses — The Juniperus Sabina is an Emenagogue — it has produced Abortion — The Savine is an universal stimulant — the oil of Savin is an diuretic medecine —

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Notes on the Lectures

on Surgery

delivered by

Drs Physick and Dorsey

in the

University of Pennsylvania

1809 — 10

Taken by

Thos. D Mitchell

Philadelphia

The most simple accident that we are called to is produced by the contusion of a part without any external opening - next to this, the simplest accident is the rupture of a small blood vessel - the next is the rupture of several vessels - in these cases, if the cellular membrane be ruptured, an effusion of blood ~~of~~ takes place, called Ecchymosis -

Union by the first intention is effected by the coagulated blood between the cut surfaces — adhesive Inflammation is effected by the divided vessels throwing out coagulating lymph, which becomes vascular.

The vessels are enlarged in inflammation as Jno Hunter proved by experiment — he took a rabbit and froze one of its ears — then killed it, injected both ears, and on examination the vessels in the frozen ear were much enlarged —

In Ecchymosis cold water is the best application; if the tumour continue without inflammation, make a puncture with a lancet; thus the contents are discharged, the internal surfaces come together and union by the first intention takes place. A compress and bandage is a good remedy in Ecchymosis.
I once knew a man die on account of a rupture of a coronary artery — the pericardium was full of blood.
Wounds differ in having an external communication — blood coagulates between cut surfaces and union ensues — Union by the first intention is unaccompanied with pain.
A complete knowledge of inflammation is absolutely necessary to every surgeon. The simple act of inflammation is not a disease, it is nevertheless sometimes accompanied with disease. Inflammation is divided into healthy and diseased. Healthy inflammation was formerly attributed to fire in the part...
When inflammation is about to commence in a part, there is great sensibility in it, with heat, redness, tumefaction, and in high inflammations, the functions of parts are for a time destroyed as in Ophthalmia &c —
The remote causes of inflammation are either mechanical or chemical. Chemical as heat, cold, caustics &c &c — Mechanical as stretching, rubbing, bruising, dividing &c &c
The effects resulting from the mechanical causes are not always

[illegible] . Different remote causes produce
different effects [illegible] — these frequently
occur in inflammation. If it would be occasioned
in three different modes all in another or consecutively.
in the first, among of the first intention will ensue, in the
second, adhesive inflammation, and in the third suppuration
or ulcerative inflammation.

x it is coagulating lymph in dropsy &c.

When we are about to perform an operation of importance
we should always inquire into the patient's habits, mode of
life &c and if we find him accustomed to good living &
the like, we should never proceed to the operation until we
see reason.

I have a patient some time ago with a stricture in urethra
who deserved me greatly on the point of surgery — under
his description, I applied caustic as I had intended from the
first and in consequence of the great irritability of his system
violent inflammation ensued and a great abscess
formed in perineum — the patient after much suffering, now
acknowledges that this a cause of pain he had never felt.
Another instance illustrates the stages of inflammation viz
Adhesive, Suppurative and Ulcerative. The adhesive
originates in the centre of the region of the heart and extends
[illegible] where inflammation is much
greater [illegible] where pain is so [illegible] — the ulcerative
region is [illegible] — in inflamed part, the blood circulates
less at external colour. Inflammation is attended with pain.
The pain is produced by the mechanic contraction of the muscles
[illegible] Hemorrhage, Suppuration explain —
[illegible]

by a Thermometer. The matter secreted in inflammation is a portion of serum* and red globules, united afterwards by cellular membrane.

Extravasated lymph becomes afterwards vascular, forming cavities. Lymph undergoes some changes in passing through inflamed vessels. The effects of inflammation on the constitution vary according to its situation. Inflammation in tendons occasions violent pain. Violent inflammation in a part is accompanied with symptomatic fever — the pulse is hard, full &c —.

A man 36 years of age received an injury on the ancle, by means of a bar of Iron falling on it. and when I saw him, he was supposed to be dying — he was convulsed and affected with tremors — his extremities were cold — his pulse was small — he was relieved by a dose of Laudanum — I applied bread and milk poultice to the part affected.

In inflammation seated in glands, the extravasated lymph is not absorbed — by these means schirrous tumours are formed; the tonsil glands are evidences of this. Glands are enlarged by the extravasated lymph in them becoming vascular & and such glands often become schirrous; the breasts of women are instances of this — schirrous tumours of this kind, differ from Cancer. Sharp made this remark long ago.

Adhesive inflammation terminates by a large secretion of serum*. Inflammation excited by cantharides terminates in this way. Thus also terminates inflammation of the brain, forming hydrocephalus — in the thorax, forming hydrothorax — A young man had an inflammation of the eye — an artery on the eye-lid gave way, by which the patient lost a great deal of blood, and thus inflammation was removed —.

place to leave me. I never leave the say that
only children of 2 yrs. of age use such words as this
is hard, hard to —

If inflammation be not resolved, it will be followed by suppuration – we should sometimes choose suppuration – When inflammation supervenes in the summer season in consequence of a wound, we should not hasten resolution for fear of tetanus. In parts where much mischief may not be likely to follow, use resolution.

I have seen opacity of the cornea accasioned in consequence of the patients fear of leaving* me take a small quantity of blood from him, though the inflammation of the eye was very great. The indications in inflammation are First, To remove the remote causes. 2d. To remove or lessen inflammatory action. Diet should consist of substances which contain but little nutriment – as tapioca, rice &c. broth is injurious – abstain from the use of ardent spirits. venesection is an excellent auxiliary remedy – on this subject we shall be more full hereafter. Bloodletting is useful by diminishing the content of the blood vessels. Purging is beneficial by the same action. Neutral salt with antimony lessen the quantity of blood in the vessels – Rest is necessary, the whole body should be kept still. Patient should be kept in proper temperature – use scarifications, cupping &c in local inflammations. Inflammation occasioned by the system should be treated with general bleeding. A substitute for bleeding may be obtained by placing the inflamed part in an elevated posture. When in the leg elevate the foot either by a cushion or raising the foot of the bedstead; thus we prevent the too great flux of arterial blood to the part. When an inflamed part feels very

* the redness and swelling increase also — the part becomes softer —

& emaciations, nausea, vomiting &c —

Hectic fever has been attributed by Cullen to an absorption of pus, but this is incorrect — argument adduced

an abscess is a circumscribed cavity containing

Hectic fever occurs in inflammation of joints where there is no suppuration

+ these increase the suppurating surface —

hot, moderate the heat by cold applications; this should not be used longer than is necessary to diminish the heat to a comfortable temperature. For this purpose we use preparations of lead. Spt. of wine - vinegar, val ammoniac - spt. minderer - fomentations, poultices simple or medicated - of the first, bread & milk or linseed meal poultices - medicated, by mixing there with other more active ingredients. Blisters on inflamed parts are the most effectual - these render large evacuations unnecessary - - - - - - - - -

Lecture 2d. Nov 15th 1809. Wednesday.

I proceed to speak of suppurative inflammation - When an inflamed part is about to suppurate, the pain increases - after the formation of pus the pain is moderated. The sweating stage attendant on suppuration is always relieved by discharges of pus - hectic fever accompanies suppuration - the symptoms are small pulse, debility &c. the exacerbations in hectic fever are in the evening - there are relieved by sweating - the urine is high coloured, deposits a copious sediment - hectic fever constantly attends suppuration of particular parts, those which are vital &c - the constitution sympathises very readily with the suppuration of particular parts, vital &c - hectic fever has not appeared in some cases where large quantities of pus were deposited - hectic fever has sometimes been relieved and cured by discharges from issues - In abscesses where no point is discernable, the cure may be promoted by making a small

× previous to this a poultice should be applied where the pain of suppuration is severe use opium —

+ this is equally correct with respect to an abscess of a joint —

Abscess are sometimes opened by the death of a small part of integument —

× this may avoid by a free incision into the abscess —

o this may avoid a large scar —

o after the pus is evacuated treat the abscess as a suppurating one —

S. the acc of Smith's farm absorption —

I have seen pus absorbed from the anterior chamber of the eye by the eye's being filling the more dependent part —

o it is evacuated by Solut Sal Ammon

pus does not rot the parts — is not corrosive

blood neither act as glands in secreting pus.

× × the soft parts are absorbed —

puncture in a depending posture — in abscesses about the throat or abdomen, punctures should be made soon lest the matter should form an internal communication and prove fatal by oppressing breathing — open the abscess as soon as matter is formed — in such cases it is dangerous to trust to those applications called drawing. In some situations abscesses are attended with great pain as in paronychia — this is relieved by an opening — large abscesses in parts, often occasion pain in the head which is relieved by an opening of the abscess. I knew a lady who had severe pain in the head, which I perceived was occasioned by an abscess of the calf of the leg —

Abscesses on the face should be opened early — abscesses tending to impede respiration should be opened very soon. There are two methods of opening an abscess — 1st by a Lancet which is the best made. 2d — By Caustics, rubbed over the abscess for 8 or ten minutes — this forms an eschar — I have seen pus absorbed by the application of Blisters. Pus taken from a healthy sore is like cream, has a strong odour — its specific gravity exceeds that of water — does not mix with water unless agitated — Pus is distinguished from other fluids by the colour of its globules &c &c — On secreting surfaces, pus is soon formed — Hunter supposed pus to be secreted from glands at the extremities of arteries —

I proceed next to speak of Ulcerative Inflammation

In the ulcerative inflammation, large portions of the solid substance of the body are lost, leaving a sore. This takes place after suppuration is begun — sometimes it

(a as in the formation of an eschar —

× it is thus that nature opens an abscess —

(b Ulceration in scrophula gives no pain —

(c the color is a pale red —

the inflammation is in the cutis vera —

(d sometimes attended with itching — the swelling is less than in Phlegmonous inflammation —

the vesication arises from effused serum

(e consequently adhesions cannot take place between the cells and thus the extent of the suppurative cavity is unlimited —

(f — it feels like wet toe when sloughed away —

(g the disease under the skin is often more extensive than it appears to be externally —

o there is no throbbing —

Escharots are successful if used in the beginning

— when suppuration takes place, make an opening directly —

a precedes suppuration as in the death of a part. Pressure long continued will occasion formation of an ulcer. ~~Suppuration~~ Ulceration always takes place ~~first~~ most rapidly on that side of a cavity nest the external surface —

b Ulceration when employed to separate a dead part seldom occasions pain — I now proceed to speak of the varieties of Inflammation —

Erysipelas

In this there is great redness, pain, &c. — succeeded by hot fever — the red colour c disappears on pressure, but returns when the pressure is removed — the pain attending it is of a burning kind — d

(e In this inflammation, lymph is never extravasated coagulated — but seem only

The cellular membrane becomes often gangrenous and (f is attended with a fœtid smell. This inflammation terminates generally in 10 or 12 days — on the face it comes suddenly — the skin is of a bright scarlet colour or a dusky red; this disappears on pressure (g &c — The tumefaction is not tense but very shining — small vesicles arise which when they burst, excoriation of the adjacent part follows, which speedily take on gangrene — The remote causes are nearly the same as in common inflammation — The cure is likewise, nearly the same — bark is used in London internally — blisters, small bleedings in some cases. Poultices are not very beneficial — Wheat or rye flour is good when spread over the inflamed surface. I have frequently used blisters with the most happy effects; suppuration sometimes follows the use of blisters, without gangrene —

Œdematous Inflammation

This exists in the skin, in anasarcous legs; it appears

(a It is similar to ~~Erysipelas~~ adhesive inflam-

(b – It is often attended with extensive mortification – I have applied cloths, wet with brandy –

(c When inflammation pervades part of the gland, the secretion of milk is diminished, when the whole gland is inflamed there is no secretion – inflammation of the cellular membrane or skin round a gland does not affect its secretion –

(d – the breast should be supported in a suspensory bag –

(a in large scarlet spots — I come now to speak of Local
(b Inflammation terminating in abscesses as in the breast of Women.

Mammary Abscesses

(c It is very rare that inflammation takes place in the whole of a breast — it comes mostly in the glandular or adipose part — The first symptoms are chilly fit often shooting, dull pains — these lead generally to an examination of the part, when hardness is perceived — the patient suffers great pain. These inflammations appear about the third month after delivery — it is said by some, that they exceed the pains of parturition — they end sometimes in suppuration — In some cases the inflammation accasions extravasation of lymph, thereby increasing the size of the gland by which various tumors are often formed — The remote causes of this inflammation are mechanical, as too tight pressure, cold, blows &c — ~~distention with milk~~ —

In the commencement of the disease 10 or 16 ounces of blood should be taken from the arm — patient should live low (purge) mercurial purge on bed — warm applications, should be applied to the
(d part affected, as bread and milk poultice — the patient should lay still in bed — If inflammation do not subside, apply a blister to the part — Women have declared that an Epispastic gave no pain and I know that blisters have produced sleep when opium would not — When the abscess is formed and a point is evident, open it and treat it as a common sore. Where a large abscess is formed and point at the top, make an opening in a depending position. Where patient were unwilling

Paronychia may exist under the sheath of the tendons - under the periosteum - under the aponeurosis of muscles and under the skin and adipose matter -

8 When we use the scalpel to open the finger, our incision should be directly in the course of the painful sensations -

to have the opening thus made, I have succeeded tolerably well by introducing into the abscess, a bougie, and by drawing it out repeatedly, the pus has been discharged. Blisters in this disease are generally the best remedies. I shall speak next of Paronychia or Whitlow. This is another local inflammation, occasioning severe pain – it generally appears on the end of the finger or thumb, but it is often situated in the whole length of the finger – the pain and danger depend on the situation of the disease. The hand and arm are frequently affected – the bone becomes often carious – the cause of this inflammation is difficultly assigned –

& The cure is effected by discharging the pus and treating the sore as a common abscess – when there is much inflammation in the parts, use a wash made of Acet. Plumbi.

Lecture 3d – Friday. Nov 17th 1809

I proceed to speak next of Psoas Abscess. This is seated in the cellular membrane round the Psoas Muscle – many of the remote causes already mentioned in inflammation, may occasion that which precedes this abscess – this abscess occasions pains in the loins, tho' this is not always the case – a dull pain is felt in the thigh and downwards – the patient finds it difficult to stand upright – if these symptoms be not soon relieved there succeeds rigors, & suppuration which makes its way into the cavity of the abdomen –

8 The fluctuation which exists will ascertain that it is not Vermá —

In some cases the abscess points at the upper part of the thigh. I have seen it point in the anus — the integuments round the abscess are never inflamed — the tumour is tense when the patient stands erect — when pressure is made on the abdomen, matter is forced down to the thigh — I have drawn from an abscess of this kind, two quarts of pus at once — Sometimes a vessel on the internal surface of the abscess is ruptured, and the hemorrhage proves often fatal — a carious bone some times is occasioned by this abscess — when the abscess appears at the upper part of the thigh, it is sometimes mistaken for hernia's —

The treatment in the early stage of this disease is to keep the patient at rest — use a low diet — lose a quantity of blood from the arm — leeches to the part — cathartics are to be taken daily — blisters over the part are painful — if these will not answer, use issues —

When it is certain that suppuration has taken place, some practitioners have doubted whether the abscess should be opened, fearing the pus might enter the cavity of the abdomen — the patients life is prostrated by deferring the opening — very soon after an opening is made, the surfaces of the cavity become inflamed (as Hunter says) — Abernethy proposes to make a puncture in the side, this does not expose the cavity and the pus is drawn off — this is not followed by inflammation — The opening is to be made with a lancet — by depressing the point of the lancet, we are enabled to puncture the cyst of the abscess — then cover the whole with linen — the puncture in the

case must be made longitudinally on the thigh — It is very imprudent to use probes, or directors, they are dangerous in being likely to rupture blood vessels and are of no service whatever —

After evacuating the cavity (as before mentioned by the introduction of bougies) 3 or 4 times in the space of two or three weeks, the size of the abscess will be so much diminished that it may be opened the whole length and will then be no more than a common abscess — I have tried this method and am pleased with it — I have not cured the complaint because complicated with caries — I have treated abscesses of the thigh in this manner with success — in some cases, punctures will not unite by first intention and inflammation ensues — I saw a gentleman 27 years of age with tumor on the thigh, supposed to be hernia — he had it 9 months and it was gradually in-creasing — he could not assign any cause for it — he had no febrile complaint — on examination of the tumour, fluctuation was evident — the tumor on the thigh increased on coughing — the swelling increasing, I thought proper to open it as Abernethey has directed — I did so — a quart of pus came away of a cream colour — after this another quart — I then closed it with Emp. adhesiv — the patient was laid on bed — next day he felt an u-niversal lassitude — giddiness — these were removed by purging, bleeding &c — his countenance showed marks of anxiety, hectic fever, small pulse were the symptoms, a flush

(a The pain is of a burning kind —

appeared on the thigh – I blistered the part – it was attended with fever – I took ℥xvi sang. from his arm – patient fell asleep and was refreshed – on the 4th day I dressed it but no union of surfaces had taken place – fever – I took ℥vi sang. patient was relieved – I perceived there was a caries of the lumbar vertebrae – I applied Issues – patient became hectic, in 8 months he died ___ on opening his body I found an abscess extending a great length – the cartilages of the lumbar vertebrae were gone – patient had lost the use of his lower extremities previous to his death – I never saw a case in this country which was not complicated with caries of spine ___

I next speak of <u>Burns and Scalds.</u>

There are accidents which often happen –

When excessive heat is applied to the body, its effects are in proportion to the extent of heat – it inflames violently on (a) the surface of the skin – occasioning an effusion of serum – The morbid effects of burns are the death of the part. Burns affect the constitution according to the degree of heat –

1 Coal steam destroys the part in ~~some~~ most cases –

2 Burns in a cavity, joint, or head are dangerous –

3 When burns take place in children, old people and in dropsical patients, they are dangerous ___

4 Burns are dangerous in proportion to the extent of surface – a deep burn in sound constitution is not always fatal – extensive superficial burns are dangerous, because the system is unable to react ___

In burns when the life of the part is destroyed, when the pain of the heat is over, the patient does not complain of pain — I now proceed to speak of the treatment of burns — Applications to the part are

General

Constitutional &

Local —— Some authors recommend antiphlogistic remedies — we should vary these according to the state of the system — When the patient is low give him wine, bark &c — the pain is relieved by opium, when inflammatory symptoms are present, use bleeding — this treatment should be continued until suppuration takes place

The Local treatment is various —

I shall mention some remedies — Linen dipt in spt. of Wine — vinegar — holding the part before the fire — when the cuticle is burnt use oil & lime water — lead water — potato juice — these have been used successfully — The pain of a burn is different from that of common inflammation — the inflammation of a burn is more disposed to resolve than others — the fungus which rises is different from that of other sores — their cicatrices are different — Remedies must be used which tend to counteract the fire — as Spt vini — Vinegar — Spt of turpentine with Basilicon are excellent — the last remedy is the best in use — great care must be taken not to lay this mixture on the sound skin — this produces inflammation —

It is of immense importance to be careful in dressing burns — in a burn of the hand and fingers, dressings should be applied between each finger and a splint of pasteboard should be applied to the circle of the hand to prevent contractions — all depending part should be treated cautiously — we should guard against unnatural adhesions —

Spt. of turpentine and Basilicon each equal parts is one of the best remedies we use — the urine is often impregnated with the odour of turpentine — Spt of turpentine always relieves the pain, tho' the flesh be even so bare — Dr Physick related a case cured by Kentish with Spt of Turpentine and Basilicon — the whole surface of the body was burnt — I have used this successfully — we are not always called in immediately to such cases — When ulceration takes place and fungus appears, this application is good.

Lect 4th Nov. 20th Monday

The Cicatrices of burns contract sometimes so much that an operation is necessary to remove the great deformity — this is to be done by incision & dissection — I have seen the fingers connected by this contracting cicatrix —

Mortification

is the death of a part — the state of the system is very effectual in determining the remote causes — Mortification is of two kinds viz —

2d with inflammation and preceded by inflam

1st without inflammation — not preceded by inf ulceration

— The first kind is occasioned by violent contusions, intense heat or cold — patients often have their toes and feet dropping off by a mortification which comes on without inflammation —

containing bloody serum —

× moderate argent light —

regard to state of the system —

When inflammation followed by mortification

~~the~~ is great pain —

× rub the parts with strong ammonia and then put

put them in spring water —

 first blue, then purple, then black —

When a part dies it loses its colour — the cuticle separates — when a small part suffers death, a mild poultice is the best application — when high inflammation attends the death of a part, evacuations are to be used — when the constitution sinks, give wine, bark, opium &c — he related a case in which mortification ensued by tying up the femoral artery — this is not always the case in tying up this artery — when a part has been exposed to intense cold, pain succeeds for a while, the part becomes red — its sensibility is destroyed — the sudden application of intense heat causes death to the part to which it is applied — mortification sometimes takes place when no remote causes are present —

Mortification preceded with Inflammation

There is a species of mortification which takes place on the toes — an inflammation of a dusky red colour is first seen on one of the toes — vesicles arise — bloody serum flows out — the part then turns purple — then mortifies — I once saw inflammation like this on a gentleman's foot — an old woman was called in and used what she called drawing salve — When I saw him, there was a large space entirely exfoliated — the mortification spread — the inflammation extended — the whole leg mortified and the patient died — Opium in these cases is good —

Soft poultice — In mortification of the legs of this kind, some have advised to amputate — such an operation should never be performed while the mortification is progressing — we should endeavour to separate the dead parts from the living first by emollient poultices — At the earnest request of a patient I performed the above operation — I must observe that before I amputated, the mortification was proceeding up the legs — application were made to no effect — I declared that the mortification would not stop by amputation — after I operated, all went on well for a few days — but the mortification soon rose above the stump and the patient died — pressure long continued occasions mortification — this is often the case on the Os sacrum — The symptoms preceding mortification are burning pain — high red colour when it comes on pain departs — colour changes tumefaction subsides — small blisters arise round the part — into these red globules are effused — the sensibility of the part is destroyed and it soon undergoes the putrefactive fermentation —
Balsams &c to the part must be avoided —
Incision and scarifications in most parts are injurious — the remedies to be employed in most cases are either General or Local —

intermittent sweating & laughing

If inflammation continues, evacuations are necessary — pain is relieved by the use of Opium the strength must be supported by nourishing diet — The local treatment consists in removing the exciting causes — when mortification is likely to ensue from confined pus, open the abscess — After this the best application is bread and milk poultice — remove pressure — use the charcoal poultice — tho' this is improper until mortification is complete this poultice acts by its antiseptic properties — I have seen the fermenting poultice with charcoal used with advantage in correcting the fœtid smell — when the smell is very offensive, wash the part with Nitric acid ℥i diffused in Aqua ℥iv this is effectual in stopping the putrefactive fermentation — A second species of mortification is that peculiarity it assumes in consequence of the peculiar nature of the inflammation attending it. The inflammation preceding carbuncle is violent — patient call it a burning pain — a kind of suppuration takes place in the cellular membrane — good pus is not formed — carbuncles mostly occur in old people — they occur sometimes on the head, these are dangerous — they are more commonly found on the scapula or thereabout —

+ Caustic to eat, entirely through the integument has been used with success – it is quite as painful as the Nitrate of Silver

The peculiarity of this mortification arises from the peculiarity of the inflammation attending it — The mortifications in these cases must be treated as other mortifications — by exciting inflammation in the sound parts adjacent to the diseased - the mort-ification in the latter is arrested. In attending to numerous cases of this kind, I was struck with the idea, that blisters applied on the sound flesh near the affected part, would arrest the mortification — I have tried this and found it to answer my ex-pectations — I will relate you a case of mortif-ication treated in this way — Capt. R. Allen had violent inflammation round the perineum ac-casioned by using ~~a~~ ashes ~~mat~~ instead of paper for a necessary business — mortification commenced — leeches were applied to the parts inflamed — over the mortified part and on the entire surface of inflammation a blister was applied which completely arrested the progress of mortification — in the worst stage of disease bark was given — the mortified parts sloughed away and the patient got well — Dr. related another case in which a most alarming mortification was arrested by Cantharides — Blisters in carbuncles are excellent remedies —

Contused wounds are divided into Lacerated, Punctured and Gun Shot Wounds —

Was applied above the knee because there is here only one bone

Lect 5th Nov. 22 — Dr Dorsey Wednesday

Of Wounds

Wounds are breaches made in parts which have an external communication — they differ with regard to their extent and to the nature of the instruments inflicting them — 1 incised wounds are made by sharp instrument, 2 contused wounds by rough instruments — 3 Lacerated or gunshot wounds — a wound in the same part made with a sharp instrument, pours out more blood than when made with a rough instrument — this is easily explained — in an incised wound, the injury extends no further than the cut surface & coagulation does not easily takes place — the vessels in contused wounds are injured beyond the divided surfaces — in contused wounds, the hemorrhage is stopped 1st by the diminished power of the vessels 2d By lateral pressure 3d By the death of the part —

In incised wounds, the surgeons object is to stop the hemorrhage — with this view, a tourniquet must be applied above the wound — above the elbow & above the knee according to the situation of the wound — bandages fit to be applied, before the tourniquet — guard against the anastomoses of vessels by ligature — every divided artery must be thus secured and sometimes the assistance of the tenaculum is necessary —

X an ate faucet

when the wounded vessel is too high for the application of the tourniquet above it – place it on the divided vessel or take it up with a tenaculum – thus we must do with the inguinal artery – it often happens that the wound is so small that the blood cannot escape – in such cases you must open it – arteries when cut, lay sometimes too deep to be taken up – Dr. Physick divided the internal ~~iliac~~ pudic artery in an operation for lithotomy – it was situated deep and could not be seen – it could easily be felt by pressing it with the finger – with the tenaculum he took it up and tied it – here the pulsation of the vessel was his guide – arteries are sometimes so situated that they cannot be secured by ligature – here we must use compression with sponges – astringents &c – if these fail, we must have resource to the hot iron –

After the hemorrhage is stopped, the object is to bring the edges of the wound into contact –

adhesive Plaster is used for this purpose, spread on linen or fine leather – these to be applied in a transverse direction, about 1/4 inch distant from each other, to admit the escape of blood, serum or pus – if either of these be prevented from escaping, the divided surfaces will be kept asunder occasioning large abscesses ——

In cases of simple incised wounds, the cure is effected in 48 hours frequently – the inflammation requires some attention – here, bloodletting is necessary, rest, low diet – if the wound is not inflamed and weakness is present give animal food – wine &c –

The practice of bringing the sides of wounds together by Emp. adh. is mostly practicable – wounds occasioned by glass are exceptions – there are contused wounds Emp ad. & bandage is sufficient to keep the edges of incised wounds together – In incised wounds on the anterior part of the thigh, keep the leg flexed & foot extended – the reason why adhesive plaster is preferable to sutures in soft parts, is because the patient suffers greatly in sewing – it makes likewise another wound – ligatures excite suppuration – therefore dispense with these if possible – sutures are indispensable in some wounds as in the lobes of the ear, lips, nose &c – Wounds in the abdomen are to be treated with suture – this is to be used sometimes in scrotum – in wounds of the scalp different kinds of sutures are used viz – interrupted and twisted sutures –

<u>Contused wounds</u> – These are made with blunt instruments – there is a division of continuity and sometimes disorganization of the part – there is little hemorhage – when the wound is extensive the patient suffers great pain, we use anodyne &c to obtain rest –

Dovers powder - composed of Pulv. Sal. Nitri gr. X Pulv. Opii gr. 1 - Tart. Ant. gr. $\frac{1}{6}$ - soft poultice to be applied composed of milk and bread - these are the best applications to the contused parts until they slough out — If inflammation should come on accompanied with fever, use blood letting, cathartics, but these are used with more safety in winter than summer; If gangrene come on, give opium, barks, porter, good diet &c. according to circumstances - when a contused wound becomes a healthy sore - if the swelling has subsided, approximate the sides together with Emp. Adh. the treatment is now the same as in incised wounds.

Of. <u>Punctured Wounds</u> — These are generally made with sharp pointed instruments; the external opening is small and contracted in proportion to its depth; they are attended with great irritation - in these as well as in lacerated wounds, probes should not be used - they are injurious by tearing open the wound - we should never use them except when extraneous matter is present - if it is necessary to dilate the opening, this must be done immediately after the wound is inflicted - if inflammation come on use a moderate diet, venæ sectio, sudorifics - it is scarcely ever necessary to make an opening to search for extraneous bodies - these are generally discharged by suppuration if matter forms beneath the surface and is prevented from escaping by the smallness of the opening, dilate it — If it should be necessary to dilate the opening in order to take up any vessels that may be divided, do this at the first dressing — convulsions often ensue from small punctures - these are relieved by enlarging the wound.

(look at page 56)

Cases related where opacity of the cornea was produced which lasted for a considerable time but was finally removed by the use of mercury ——

O do this with the point of a lancet —
× also the pith of Safsafras in infusion —

Lect 6th Nov 24th 1809 — Friday — Dorsey

of Particular Wounds

Wounds of the eye lids — In incised wounds of the eyelids where no loss of substance is sustained — close the edges by Emp. adh. when this will no do, use sutures — in stitching, take care of wounding the adnata; pass the needle thro' the skin & cellular membrane only. In some instances, the globe of the eye is wounded — this may happen by piece of sand, iron glass & getting between the lids — in other instances, the internal parts of the eye are wounded — as with shot — a young man in blowing rocks, had his eye pierced by fragments of the rock, in these cases the pupil is often obliterated — the lens and its capsule adhere — these require some remedy — remove the extraneous matters when possible — use bleeding, purging milk &c — no astringent medecine to be used — the eye lids must be kept closed — the patient must be kept in the dark — by these means, opacities, suppurations &c — may be prevented — opacity of the cornea may be afterwards removed by a surgical operation — this to be described hereafter —

Wounds of the face — in these if the edges be kept in close contact, union by first intention will take place — in contused wounds of the face, apply a poultice — when granulations arise, apply Emp. adh. to draw the edges together — When the lips are cut completely thro' and no loss of substance sustained Emp. adh. is sufficient — in some cases of cut lips, use the interrupted suture —

Dr Physick in 1811 objects to the use of stitches altogether as useless and hurtful —

Dr P read a case from Med Commentaries where trachea and oesophagus were divided — patient supported by nutritive injections — stitches were used at first, but prevented the wound from healing — they were removed and the lead bent and the wound then healed completely —

× I saw a case of this kind in an old woman who stuck a pen knife in the oesophagus —

Sometimes the anterior part of the tongue is cut — this must be treated with the interrupted suture — if care be not taken, the surgeon's finger will be bitten, this may be prevented by placing a piece of wood between the teeth — feed the patient with spoonful victuals — when the ear is cut, use sutures —

Wounds of the Throat

These happen in cases of suicide — when the skin is only wounded the treatment is easy — sometimes the trachea is cut, also the oesophagus — in these cases the hemorrhage is to be attended to — secure the vessels by ligature even if the carotid artery be cut — when the hemorrhage is stopped close the wound by Emp. adh. if trachea be divided join it with suture — the stitches are to be passed thro the cellular membrane outside of the trachea — if the stitches be passed in the trachea, they occasion coughing — afterwards the patients head must be kept bent forward and secured by bandages — it will be best not to draw the edges too close together — when with this, the oesophagus is open, the danger is increased on account of the difficulty of closing the wound — Dupuytren introduced the catheter into the oesophagus, to inject nourishment — a wound in the oesophagus to be joined by the interrupted suture — if coughing occurs, use demulcent remedies — oesophagus may be cut without opening the carotid artery — case related of this kind — in some cases, the pharynx is wounded without injuring the larynx or trachea —

(look at page 50)

In July 1795 a young man run a nail in his knee - it gave him very great pain - anodyne was given at bed time - the morning after the accident he had a severe pain in his head - complained of sickness - his wound felt easy - pulse quick and frequent - his eyes were heavy - conceiving that an enlargement of the external wound would relieve the pains in the head, a director was passed and the wound opened - his pains were immediately relieved and in a week all was well - when punctured wounds occur in warm weather on the extremities or any where else, do not heal the part too quickly - give the patient good diet - by suffering the inflammation to remain in the part, we are likely to avoid tetanus

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Dorsey — 7th Lecture 8th Monday - November 27th - 1809

Of Wounds of the Thorax and Abdomen

Wounds often penetrate through the covering of the thorax and abdomen, which sometimes prove dangerous - The danger attending these is increased by the injury likely to be done to the contained viscera. If the thorax be perforated, unless the wound is small, air will enter the cavity, and respiration will be thereby injured - if a vessel be wounded the hemorrhage ensuing may be dangerous - in case of an intercostal artery being wounded, it has been recommended to pass a ligature round the middle of the rib - the sides of a wound in the thorax will heal readily ~~heal~~ by first intention, with the use of Emp. adh. - this cannot be done if the wound be made by shot - they kill the flesh which sloughs out - A young man was shot by the accidental

discharge of a fowling piece – the contents of the gun passed through the right side between the 7th & 8th ribs and about 3 inches from the sternum – when Dr. Physicks saw him his pulse was quick and frequent – bleeding was resorted to – purging &c – the wound was dressed with a poultice confined in canvas bag to prevent any of the poultice from getting into the cavity of the Thorax (for if any should get in, violent internal inflammation would be the consequence); on the 4th day, there was a serous discharge from the wound – the fever lessened – the serous discharge was the effect of increased action of the internal vessels in consequence of his fever – he was bled – in twelve days he lost ℔120 – sang. On the 14th day – the serous discharge had become purulent – in a short time it granulated – in consequence of the external opening being pretty large, some air must have entered; writers on surgery (Bell &c.) give many directions for drawing air out of the cavity of the Thorax; but this is of no importance – in the case related it was quite unnecessary – Hunter says, air in a cavity does not occasion inflammation – a case related – patient wounded in the Thorax – the wound was full half an inch long – wound entered largely – as was heard by placing the ear to the opening yet no method was employed to discharge it – the wound was completely closed with strips of Emp. adh. – Cured – we see no reason why the air may not be absorbed like any other fluid – we think it really is absorbed —

X have a needle on each end of
the ligature —
when granulations arise and stitches are loose
remove them and apply C mp adh.

In the wound of the intestines blood flows pers
anum there is depression, coldness, tremors &c.

Of Wounds of the Abdomen

There must particular attention on account of the viscera lying beneath — When these wounds are superficial — the common treatment of incised wounds may be used — If the integuments be completely divided, we should endeavour to obtain union by the first intention — as the edges of the wound will be approximated difficultly by the use of Emp. adh. we must often have recourse to suture — the interrupted suture is best — pass the needle from the inside of the belly outwards about 3/4 of an inch from the edge — the peritoneum is to be taken up in the stitch — the stitches are to be made ½ an inch from each other — tie none of the stitches until you have done sewing — if you suppose any of the viscera injured, search for the injured viscus — if the stomach or intestines be wounded danger arises from their contents being thrown into the cavity of the abdomen, thereby occasioning peritoneal inflammation, which generally ends in death — In almost every case where the external wound is large, a piece of intestine is protruded — if the injured viscus be the stomach, there will be a vomiting of blood — nausea comes on — depression of strength — cold sweats — tremors &c. and if there be not relieved very soon, death will occur — this last takes place mostly in the space of 3 days, tho' sometimes in a few hours — Death arising from wounds of the abdomen is always preceded by Coma —

If the intestines are wounded in any part, stick, and return the sticks into the intestine — they will pass with the faeces through the intestines —

+ The difficulty is lessened by giving the nutriment as liquids &c –

A case was related in which a man had shot in the intestine – the shot passed per anum so that the intestine must have been perforated, yet no incision was made to search the wounded intestine and the patient got well –

In cases of ruptured intestine or stomach, we must take great care in the administering of nourishment — spoon-victuals only can be used — where the wound is in the stomach, injections should be used instead of taking food by the mouth. A case related in which the stomach was perforated, & the patient was nourished with injections —

In longitudinal wounds of the intestines, union is more difficultly effected than in those that are transverse —

If a portion of intestine be bruised, it may be cut away with safety, for you know we often take away large portions in hernia — when you cut out a portion of intestine unite the ends by suture — 4 stitches are generally sufficient for this purpose — return the intestine with the stitches into the abdomen — if the omentum or mesentery be wounded and hemorrhage come on, use ligature — these ligatures must be left outside — if you put the ligature into the cavity with the omentum or mesentery, inflammation will ensue —

if the injured part of intestine be not protruded, owing to the small external opening, it becomes a question, whether we may dilate the wound — we may dilate a little — I would not enlarge much — recovery from wounded intestines has happened, when no dilation was made — in these cases adhesive inflammation went on internally, on the outer surface of the intestine — when this is the case, a low diet is necessary, with bleeding, purging &c —

In wounds of the intestines made with shot, the contents of the bowels are apt to be thrown into the cavity of the abdomen — When an intestine is wounded, if the external opening on the

× the urine will flow externally until granulations arise —

abdomen be not large enough to admit a view of the injured intestine, let it be stitched - give very low diet as bread and water - Laudanum to ease the pain - if fever come on bleed freely - fomentations - blisters - when a wound penetrate, the right hypocondriac, you are to suspect the liver - when this is wounded, there is severe pain in it - if the right lobe be injured, there will be felt a pain in the shoulder - this is the same kind of sympathy which exists between the shoulder & liver in Hepatitis - small wounds of the liver heal often readily - large ones prove fatal on account of the large blood vessels - in these the blood flows externally as well as internally - if patient survive this, peritoneal inflammation is likely to ensue which mostly ends in death - all that can be done in such cases, is simple & ineffectual - rest - barley water for the patients food - if by these means the hemorrhage stops - the low diet must be continued -

Wounds of the gall bladder are fatal -

when the kidneys are wounded there is a flow of bloody urine - a wound in the posterior part of the kidney is not dangerous - if the kidney or ureter be wounded it is certainly fatal, on account of internal inflammation - if the smallest quantity of urine gets into the cavity of the abdomen, death ensues - if the cellular texture be wet with urine, it mortifies speedily -

Lect. 8th Nov. 29th Wednesday - 1809 -

of Wounds penetrating the Cavities of Joints -

These demand immediate attention. In incised wounds of the cavities of joints great care should be taken - anchylosis sometimes follows - in such cases the limb must be so situated as to keep the side of the wound in contact - this is to be done with Emp. adh. They uses sutures -
If you use sutures, do not pass them in the capsular ligament of the joints - the integuments only must be taken up —
Wounds of the joints, if care be taken heal kindly - a case related of wound in the joint of the knee - patient ~~with~~ got well in a week by the keeping the leg perfectly straight and still - They has used this method with success - a case related - wound on patella with a hatchet - it was dressed with Emp. adh. - he had used spt. Turp. on it - patient was confined 4 months - he could not bend his knee - when he attempted this, he had convulsions - pus was discharged in considerable quantities - bled, purged & blistered - an abscess formed in the joint - leg became oedematous - this was removed by purging and bleeding and the patient recovered - the joint remained somewhat stiff - If a splint had been applied posteriorly at first, it would have done well - In every case where a wound penetrates one of the capsular ligaments, a splint must be applied to keep it still - they moderate the swelling -

The splint from Tuber Ischii; is to be applied below the head of the Tibia extending to the Ischium —
When the cavity of a joint is opened by a lacerated wound — union by the first intention cannot be obtained — join the edges by extension of the limb — a poultice to the wound ~~as well as prepares~~ — use bleeding, leeching, blistering &c — very low diet — purging if not painful — when granulations arise use Emp. adh. — it would be improper here to use sutures or even sticking plaister — tension is thus increased — let inflammatory symptoms subside — use poultices until suppuration ensues — then draw sides together by Emp. adh. — if edges can be thus united, then it will do well — when the edges do not inflame, there is frequently a discharge of synovia of joint which inflames it — In extensive lacerated wounds, it is doubtful whether the patient will live, if the ends of the bones are hurt — In such cases a question arises, whether we should amputate or not — mortification sometimes ensues amputation — in other cases the functions of the system are destroyed or disordered & delirium follows — Case related — a lacerated wound of the Ulna at its junction with the Humerus — patient would not have it amputated — it was extended by the attending Physician — if the patient had have lived he would have had a stiff joint — the edges of the wound were kept together by Emp. adh. — this was a wrong practice — a poultice would have been better — the attending surgeon was of the Old School — the patient had Nausea & vomiting —

had great pain in his arm and could not sleep — Opium was given in vain — drepings were taken off 4th day poultice applied — purging commenced 7th day delirium violent — had to be confined in bed by straps — gangrene took place — pupils of the eyes were contracted convulsions followed and the patient died — this mode of treatment was very incorrect —

If a patient under this mode of treatment do evade mortification — tetanus is likely to follow or if this be not the case, he will be teased with suppuration & hectic fever and if he survive this, anchylosis will follow — the effect of lacerated wounds on the constitution are not easily known — the danger of these is greater if they happen in summer — I speak of lacerated wounds, where the ends of bones are fractured — the danger of these wounds greater in intemperates than those of moderate habit — young people more likely to recover than old folks —

We often succeed in curing these wounds — the stiffness frequently follows, by the inflamed capsular ligament and of one bone uniting to the other — the cartilage between bones is frequently absorbed, this is effected by granulations arising on the injured surface of bones, these absorb the cartilage, thus an anchylosis or bony union is effected — you now see why surgeons have advised amputation

× After venesection if the pain continue for 2 a 3 days respect the partial division of a nerve

in these cases — as the sawing off a bone is painful I think the object might be obtained by scraping the cartilage away with a knife —

Wounds of Nerves & Tendons

The entire division of a nerve occasions for a moment severe pain — inflammation is said to take place round the wound — I now guard you against an operation much recommended, that of cutting down to the bone — If there be a violent pain — one might suppose a partial division of a nerve — here one might make an incision — I have never seen a case in which such an incision was necessary — a substitute might be made for the incision — the same remarks are true of tendons when made with clean instruments, these wounds generally heal — when the wound goes below the tendon or nerve there is severe pain and delirium — relief is directly obtained from the entire division of tendons and nerves — the early application of blisters generally gives relief — the division of the fascia gives relief — the tendons are sometimes cut thro' — the edges of the wound must be kept close with bandages &c — Tendo achilles is often cut — a splint must be used — a strap and bandage — apply Emp adh. — wounds of Tendo achilles is important the sides must be kept close — Dr Monro has proposed a set of machines to keep foot extended & still — Dr Physick's splint to anterior part of the leg

+ some extension may be made of peroneus longus and long flexor of the great toe –

The ancients were in the habit of keeping the cut edges of tendons together by suture – The fracture or rupture of the Tendo achilles happens in jumping, dancing or by exerting on any account the strength of the Gastrocnemius muscle – After the accident, the patient cannot extend the foot so as to raise himself on his toes – the ends of the tendon may be felt by examining above the Os Calcis –
The rupture of some of the fibre of the Gastrocnemius muscle often happens in consequence of violent exertion – I knew it to be produced by jumping over a very wide gutter – the sensation described by the patient is that of a blow on the part – a cracking snap is heard – patient cannot walk in the usual way – at first very little pain is felt – but if care be not taken, inflammation supervenes – there will be a kind of ecchymosis from extravasation of blood – patient must either sit still or lie down in bed – if inflammation subside, he will be soon able to crawl about – if too much exertion be now used, the part will be again ruptured and the former symptoms appear – all these accidents are to be treated on the same principle – In the rupture of Tendo Achilles, it is absolutely necessary to extend the foot – and in that of ruptured Gastrocnemius muscle to keep the edges close and part still – In the division of Tendo Achilles, if the skin get between the edges of the wound, you must join the integument with 2 or 3 stitches – these stitches are to be made in the skin only – I now show you an apparatus or machine for

* Side AAA is grooved so as accurately to fit the anterior part of the leg & upper part of the foot keeping the latter completely extended & embracing about half their circumference in the groove

Splint for divided tendo Achilles

these accidents - it is simple and can be made by any person accustomed to carving in a little time - I have one made by a carpenter in 2 hours - of cedar or any light wood* - direct your workman, to take with a piece of paste board, the exact shape of the sides of the leg & foot extended - by stretching the foot on the leg and cutting the paste board in the shape from the outside of the knee downwards to the toes - having the shape of the sides, he is next to lay a piece of paste board on the anterior part of the leg and foot extended - cut exactly - then he has the side, or bearings from which, if he be a workman, he can easily form the machine — the machine is to be laid on the leg and a bandage passed around the heal & foot over the splint - then another bandage on the calf of the leg —

"Wounds of the Veins"

These occasion little trouble - the hemorrhage is easily stopt - They are apt to become inflamed on the inner surface or I should not have mentioned them - I will read the observations of Hunter on this subject —

The coats of large veins passing outwards thro' the integuments become inflamed - under such circumstances, suppuration will probably take place, and unless care be taken, there will be abscesses formed -

Inflammation of veins often happens, where no tendon or nerve is wounded, so that the vulgar notion of this inflammation arising from wounded tendons or nerves is merely false —

the cause of inflammation in veins is owing to the wound not uniting by the first intention —
Inflammation in a part of a vein is frequently caused along the course of the vein — when the inflammation of veins is extensive, the constitution will sometimes sympathize — when the inflammation is extensive, we cannot use a compress on the vein, because the pain attending such treatment could not be endured —
Bell's method of cutting the soft parts down to the bone is imprudent and unnecessary — I have cured inflammation from a wounded vein by the use of a blister over the part — perhaps it is well to put a piece of lint over the wound before applying the blister; A young woman in the Penn.a Hospital was bled in the median vein — in few days it was followed by inflammation, like the erysipelas — I applied a blister over the part and it was cured — the arm sometimes remains bent after recovery from inflammation — I knew a case of this kind — I have always found blisters successful —

+ They were supposed to make a distinct branch of Surgery ~~of Surgery~~ —

O the livid color, vesications, ichorous discharge &c led to a supposition that the wounds were poisoned — The antidotes were all acrid and gangrene often followed their use ~~freely~~ —

+ I shall ~~show~~ show you that there were not poisonous nor burnt —

O when a ball passes with great velocity it kills the parts with which it comes in contact —

Hemorrhage is apt to occur in these wounds during the stage of sloughing — —

When a ball does not pass violently the sides of the wound are not killed and uniently the first intention often ensues —

December 4th 1869 Monday

Of Gun shot wounds.

When fire arms were first applied to the purposes of war, wounds occasioned by them were considered to be poisonous. Some have said that venom was sent into the wound with the ball, others that there was carried into the wound a quantity of fire — the slowness of these wounds to inflame, the slough that are cast off were the reasons which induced the ancient to think so erroneously — By examining the nature of a gun shot wound, I hope I shall be able to give you some light on this subject — a gun shot wound is formed by the forcible and quick shock received from a musket &c — the often partake of the nature of lacerated wounds — the injury done is in proportion to the velocity with which the ball is carried — when the part is much contused, union cannot take place, until the dead part slough out — in deep seated gun shot wounds, where large portions of flesh slough away, it is necessary to watch when the slough is about to come away as violent hemorrhage may follow the discharge of the slough — Same gun shot wounds unite by first intention — when a ball passes from one side of a part to the other, the orifice out of which it passes is found to heal before that at which the ball enters —

Dilate also where respiration is likely to be affected from the presence of the Ball — also where there is great hemorrhage ~~a la~~ dilatation might be made to take up the bleeding vessel —

o where symptoms of injured brain exist —

Some practitioners would remove that part of the cranium over which a ball had passed, saying it would otherwise die — we must attend to the symptoms —

If fragments of bone are so situated as to be easy of extraction, by dilatation, this must be done — where the ball lies very deep do not dilate ~~dilate~~ —

o a sac is formed by ~~which~~ adhesive inflammation

Wiseman relates the case of a man who was shot on the outside of his thigh — the ball was found on the inside — inside * —

o or lintseed — the poultice must be continued until suppuration ensues —

+ except in particular cases —

o a dose of ~~Dover's powder~~ —

+ Ramby advises this —

The enlargement of a wound must not be attempted if it can be helped — unless some circumstance render it necessary — as when the ball lodges near the trachea — In gun shot wounds of the scalp, dilatation is always required — if the cranium be fractured, it must be treated accordingly — the cranium require great attention on account of its important contents — when the cranium is fractured we must use the Lephine —

If fragments of bone or a ball be so situated, that they cannot be extracted, you must not dilate — Ranby says the use of probes and directors in these wounds is very improper — if you determine to search, says he make use of your fingers — probes and forceps often injure as much as the ball — balls remain often in part for many years without injury, it is encysted — the wound of a ball is seldom straight, and this is a great objection to dilatation — balls have struck the shin and passed round the leg —

The best application to gun shot wounds is a poultice of bread and milk — all stimulating articles are to be avoided — most men after receiving a gun shot wound, have cold extremities, weakness &c — give sudorific medicines — it has been recommended by surgeons to bleed in all cases of gun shot wounds indiscriminately — I am not of this opinion —

We should only bleed to moderate inflammation when too violent —

When the inflammation is in proportion to the degree of injury done, it is always salutary —

In cases where inflammation soon subsides, by venesect, Tetanus often follows — a case related to this effect —

If you wish perform amputation at all in such cases, do it before inflammation ensues or, if you wait too long for this, do it after inflammation has entirely subsided, else you will be likely to induce Tetanus —

+ in substance or decoction —

o These are compound fractures

Wounds of the spine are sometime made by balls — where the spine is wounded above where the phrenic nerve passes off death is the immediate consequence — when the wound is below the part " general paralysis follows —

I believe it would be more correct to delay evacuations of every kind, until fever comes on — by bleeding immediately after the reception of a gun shot wound, it often happens that Tetanus ensues especially in the summer season. — a case related — a man was shot in the palm of the hand — he was bled by the surgeon and tetanus followed — surgeon was going to amputate the hand, under the idea, that tetanus would thereby be prevented or arrested — the man died before proper dressings could be applied —

I have seen another case in which amputation was performed — the injured part was a finger — tetanus came on notwithstanding the amputation of a part, where tetanus is suspected, opiates do no good —

As soon as suppuration is established, give bark, an invigorating diet — in gun shot wounds of the limbs, where the ends of bones are fractured, the pieces of bone that are detached, may be removed, but no force should be used to get away pieces of bone that are loose; the case is now to be treated as a compound fracture — of gun shot wounds of the head —

Dr Rush saved the life of an officer, shot in the breast by taking away in a short time ℥ 124 of blood —

Bullets often pass through joints - when the ends of the bones are wounded, inflammation and suppuration follows — when the wound is only lacerated without injury to the bones, union by the first intention may take place —
Sometime, the parts are so much torn, that amputation ought to be performed immediately — The operation should be immediate 1st Because by this we save the patient in some measure from the danger of Tetanus - 2d - Because you can persuade patients to submit to operations directly after being wounded, better than by delaying to a late period —

+ depression, hiccup & thirst

If there is great depression, sinking &c -

When treating of Wounds of the Thorax, I said that bleeding to a great extent was necessary — if this remedy be not used, inflammation of the pleura is likely to take place — give your patient low diet — apply a poultice to the part — if there be much external inflammation apply a blister — balls sometimes wound the spine occasioning Paraplegia or paralysis of the parts below the injury — if the wound happen above the Phrenic nerve, death is certain, on account of the interrupted action of the diaphragm, by which respiration is impeded — when the spine is injured lower down, patient often survive — Wounds of the abdomen are dangerous according to the injury done to the viscera — when the liver is wounded, there is great danger on account of the large blood vessels in that viscus — these are attended with great languor — in wounds of the Gall bladder, the contents of this viscus are discharged into the cavity of the abdomen, by which violent peritoneal inflammation is occasioned — in wounds of the Stomach, blood is thrown up in vomiting; there is also an escape of some of its contents by which internal inflammation occurs — so with the intestines — in the latter blood flows per anum — Wounds of the Vesica urinaria are dangerous because the urine escaping, inflames the peritoneum — this is not always the case when the wound of the bladder does not communicate with the abdomen —

+ if their contents flow internally to the cavity of the belly the danger is increased —

0 until adhesions form —

+ blisters over the region of the stomach if inflammation run high —

+ and join the ends by suture —

Case related from Hunter — ball passed transversely thro' the abdomen — adhesion formed in the whole course of the ball, and formed an entire cavity —

~~* the vis medicatrix naturæ~~

+ When the Stomach or intestines are wounded, all that we can do is to order rest – the mildest food – bleeding + if the fever runs high – a superficial dressing; "If any of the intestines be wounded, let the injured part be returned, except it be bruised, in that case cut it away" – I shall speak more of this when I come to talk of Hernia ——

December 6th 1869 Wednesday

Hemorhages are often stopped by the kind interposition of nature* – on this subject Dr Jones has written very plainly – when an artery is cut the blood leaps from it as it were (per saltum) & is of a red colour – from the veins, blood flows in an uniform stream – there is a contraction that takes place in divided arteries by which the orifice is lessened – the artery is also drawn up – after much blood is lost, the animal grows faint, and this likewise assists in the stoppage of the hemorhage – inflammation takes place between the edges of divided arteries, in order that the opening may be effectually closed – there is a clot of blood formed at the division of the artery and also a clot is formed within ——

the internal clot coagulate, and the blood cannot pass -- though Nature often stops hemorrhage in small vessels, yet the Surgeon should not trust to this in all cases — artificial means must be resorted in some cases — the ancient were very little acquainted with the best means of stopping hemorrhage — hence they were afraid to attempt the most trifling operation — they were in the habit of applying styptic medicine, and if these did not answer, they used the red hot Iron — or Cautery as it is called — this they applied to the bleeding vessels until an Eschar was formed, which put a stop to the hemorrhage — but the Eschar was liable to come away and then the hemorrhage be again renewed —

Compression is the most powerful means of stopping hemorrhages in small vessels — use lint, & small compress and bandage —

The ancient tourniquet were found useful in some cases, but their inconvenience has been the cause of laying them aside — there are some cases where compression is the best remedy — in a wound of the sole of the foot, which was attended with very troublesome hemorrhage, pressure on the anterior and posterior tibial artery stopped it —

The popliteal was in one case wounded with a knife - there appeared great tumefaction in the ham - the blood had flowed into the cellular membrane - a large clot was formed at the divided edges of the artery - this stopped the hemorrhage partially - by walking the blood flowed - ent for a while stopped the hemorrhage - this he continued 'till at length he was advised to keep in bed a considerable length of time - by this complete union took place —

In most cases where large vessels are divided a ligature is the safest method - by ligature, the edges of the divided artery are brought together inflammation take place - the lymph coag- -ulates - a clot of blood is sometimes found as high as the nearest branch - inflammation takes place likewise external to the wounded vessel —

When called in, we should apply a finger over the vessel that is divided - by this we stop the hemorrhage - the tourniquet to be employed is Pictet's improved - before the application of the Tourniquet, we should apply a compress directly over the artery ~~at~~ above its division - then apply the Tourniquet with the screw directly

over the compress — then work the screw — this puts a temporary stop to the hemorrhage — when the tourniquet is thus applied, we should clean the part and take away any dirt that may be round the wound — after this we should take up the artery with a Tenaculum by this the hemorrhage is completely closed — sometimes vessels are divided very high up, here compression sometimes is the only resource — you can by pressure on the Subclavian artery stop a hemorrhage in any of the vessels of the superior extremity — when vessels are divided in the fauces or out of the way of the above remedies, pressure with lint is to be used &c —

when small vessels are divided in such situations, use astringents — agaric, sponge — cold lint over the clean surface, previously dipped in Spt. Turpentine — after the hemorrhage is secured, bring the edges of the wound together by Emp. adh. (this has no reference to wounds w fauces) or suture as the case may be — when the wound is very deep, I leave a part of it unapproximated in order to allow the escape of Pus &c — after the Emp adh. is applied, I lay a piece of

linen over it – then I pass a roller over the whole – in the course of two or three days sides of such wounds are connected — Sutures are hardly ever necessary – when we use them – it is generally, the Interrupted Suture – by interrupted suture we mean simple stitches from one edge of the wound to the other – each stitch is to be tied separate – tho' not till after all the stitches are made — Sutures are very painful – they always produce suppuration – they are never necessary, except in wounds of projecting parts as the ears, lips &c – in the scrotum – divided intestines &c — ——.

December 8th Friday

<u>Ulcers</u> – In your attendance at hospitals you cannot pay too much attention to the dressing of ulcers — I commence with explaining the common appearance of an healthy ulcer in a sound constitution – new flesh spurts* up on the surface, which we call granulations – before these are formed, a quantity of lymph is extravasated which becomes afterwards vascular — the pus secreted is of a cream colour – by suppuration, the inflammation

*What word is this?

and tumefaction of the sore, cease — granulations are disposed to unite with each other — granulations are apt to contract themselves, thus lessening the size of the ulcer —

By granulations being formed, Nature has to form less new flesh than would otherwise be the case — the next process in the healing of an ulcer, is the formation of new skin — this takes place when the granulations have arisen to a level with the surrounding skin — now the cuticle is formed — in some old ulcers the new skin does not begin to be formed on the edges alone, but likewise in the middle —

Of the Treatment of Ulcers — a piece of dry lint is to be applied on the surface of the sore — a piece of tow dipped in a mixture with oil is to be applied to prevent it from drying up — a roller is now to be pasted over it — nothing more is necessary — Mr Banton uses strips of Emp. ach. he first shaves the hair from the part, as when on the leg — thus dressings are more easily removed — the strips of plaster to be about 2 inches wide for large ulcers and long enough to go quite round the leg and leave 2 inches over — he applies strips over the whole surface of the sore — then a bandage is pasted round the ancle,

, then down the foot to the toes — then upwards to his knee — dressings were applied early in the morning, because after the patient walks about, his legs will be apt to swell; I have tried Mr Bauton's method and am satisfied with its effects in some cases. I think he is wrong, however, in directing the whole surface to be covered with Emp. adh. — if a sore be thus dressed, all the matter will be retained on the surface of the sore — The ulcer will resemble one side of an abscess — the sore will be kept from healing. I am persuaded from experience that it is best to apply the strips of Emp. adh. about ½ or ¾ inch apart, to allow room for the escape of matter — I think it is best to make an incision in the strip directly over the sore — Mr. Bauton speaks of the application of cold water to the bandages round the legs in order to moderate heat — I have never had occasion to comply with his direction — Mr. Bauton says patients may walk about when their legs are dressed as he has directed — if the bandage were well applied, walking might perhaps be admitted — but if the patient be contented with lying in bed, I am certain the cure will be sooner effected — There are however some indolent ulcers, where walking about does good ——

We sometimes meet with sores in which granulations are slow in their appearance, and in which the edges, though approximated with Emp adh, do not unite)

here, we may wet the surface with Spirit, Caustic Lunar, blue vitriol &c — Sometimes we must entirely destroy the surface or edge by a solution of Lunar Caustic — This is not the case with ulcers in healthy constitutions — There are some ulcers which require more of the surgeon aid than we have already mentioned — When an ulcer is situated on the leg, the blood vessels and particularly the veins below the knee are more active than those above — in a granulating ulcer on the leg, the new formed vessels are often incapable of sustaining the column of blood from above and of course the veins burst and then we see ulcers wear a bloody aspect — when the vessels are not too weak, so as to be broken, the column of blood sometimes stagnates, and hence we see ulcers often of a purple hue — these effects are apt to take place where the patient stands long, erect — the rupture of the blood vessels renders the pus of a bad quality — causes bloody serum — granulations are destroyed, and thereby rendering the formation of new ones necessary — place your patient in bed and keep him there until cicatrization is effected — rest is one of the best remedies in the cure of ulcers of the legs — Bandages must be used, they are

of three kinds 1st The laced stocking 2d the cotton roller — 3 a linen coat of Emp. Adh — Laced stockings when they fit the leg are very good — but they are not always easily obtained — Cotton roller answers very well and makes good pressure — the roller supports the weak vessels — one impediment in some cases to the healing of ulcers, is the oedematous state of the parts — when water is effused into the cellular membrane the parts are distended —

The oedema is diminished by a horizontal position — granulations do not appear quickly if the part be oedematous —

It is very incorrect to stuff lint to the bottom of ulcers — this practice was formerly called dressing to the bottom — I know not the reason why this practice was ever adopted — it prevents the sore from healing — this is particularly the case in fistulas in ano — a cure is often effected by getting rid of these dressings — there was a man some time ago in Virginia, who had a fistula in ano, his surgeon dressed it to the bottom as he called it, 'till the patient got tired — he then had recourse to a simple remedy — he went daily as somebody advised him, and sat down in a quantity of soft mud at a certain creek — this had the effect of curing him,

and I verily believe this remedy was better than that which he had been so long using in vain — Sure — how queer it is!!!

Whatever impairs the health in any case, is liable to retard the cure of ulcers — very hot or cold weather — simple weakness of constitution affects ulcers —

December 11th 1809 Monday

1 Of Inflamed Ulcers — these are attended by a hot state of the part — patient should be confined and use a vegetable diet — abstain from ardent spirits — bleed and purge — use bread and milk poultice — keep the patient in bed — I have succeeded in relieving the inflammation by raising the foot of the bedstead — when the inflammation is reduced, the sore is reduced to a common ulcer —

2 Fungous Ulcers — here the granulations arise above the surrounding skin — use simple compress with bandage — afterwards approximate the edges with Bmp. adh. when pressure does not do, use Lunar Caustic over the whole surface — when the granulations are reduced, it is no more than a common sore —

3 Ulcers in Edematous legs — they are tender and painful to the touch — they have a great tendency to slough — if evacuations are contraindicated, raise the foot of the bedstead — when the inflammation is reduced, apply Bmp. adh —

+ When the ulcer is reduced to the state of a simple ulcer treat it accordingly —

4 Sloughing Ulcers — These are owing to the weakness of the granulations — the cicatrix as it forms becomes of a purple then of a black colour — the part mortifies and then slough — in some ulcers, sloughing will be going on in one place, and sound skin forming in another — there is great pain in these ulcers — in this species of Ulcers, the remedies for mortification are to be used; barks to be given freely — opium to allay pain — a poultice with Laudanum in it is the best application — the fermenting poultice with charcoal arrests the festor — In sloughing ulcers I have applied blisters over the sore with the effect of arresting the mortification in some cases it often happens that maggots form — here Dilute Nitric acid is excellent — ×

5 Ulcers met with in weak Constitutions — Here granulations arise freely, but are extremely weak — they ulcerate in a few days and the sore enlarges — here use bark — Elix: vitriol & — Granulations are often strengthened by affusion of cold water — Unguentum is a good application — I have used lint ~~wets~~ wet with solution of bark galls & Laudanum in one case with success when the granulations were very weak — sometimes the new skin is absorbed and the sore enlarges — here I have used Re. Galla —

6 Indolent Ulcers — When Nature in her operations has been so interrupted for a long time, the ulcer becomes an indolent one

the edges become hard, round & tumefied — they are above the middle of the ulcer — lymph is extravasated and not being absorbed, the edges become hard and the ulcer indolent — it is best to remove the edges entirely — this is to be done with the knife or with common caustic or pressure — use ~~a sol~~ the Common Caustic — a Calx vivi cum kali pure Mercury expedites the cure of sores — by exciting a slight Ptyalism — R Myrrh — Dilut Nit and Red Precipitat is used in ulcers —

7 Carious Ulcers — In these a part of the bone is dead and prevents the sore from healing when the dead portion of bone is loose & detached, we should extract it with forceps — then the ulcer is a common sore — when the carious bone cannot be seen it is important to know whether it is detatched or not — we learn that bone is loose by poking a probe — when the probe is pushed down with force and excites no pain, we may be sure it is not loose — for when it is loose, the probe poking against it, gives violent pain — then we can ascertain whether we may enlarge the opening — ~~the~~ dilating the opening of a carious ulcer may be effected by introducing small pieces of sponge tent — increasing the size of the piece daily —

8 Ulcers accompanying Varicose veins

~~these~~ resemble indolent ulcers — it is the state of the veins that prevents the ulcer from healing — here, bandages are very good —

we can remedy this entirely by taking up the vena saphena by a ligature — manner of performing this operation — the patient's leg being turned when he stands erect, this is the situation in which the patient should be when the operation is performed — this is the way Mr Hume does it — but this is very inconvenient to the patient — before I operate I always apply a tourniquet above the thigh to compress the veins, but not the arteries — after the tourniquet is applied, patient may lie down — the leg operated on must be placed towards the light — the skin must be pinched round the vena saphena and a scalpel passed through, this will expose the vein completely — when the vein is sufficiently dissected, apply a ligature — before the ligature is tied, put the patient to bed — the edges of the wound must be approximated with Emp adh — the inflammation is trifling — the ligature will come away in 10 days — I usually remove it in 5 days — the ligature is easily removed with a knife or scissors — after the ligature is applied, the blood passes in collateral branches —

Scrophulous, Cancerous & Venereal Ulcers

Here is a species of ulcer left of Bubo, in which the ulcer enlarges —

Compound Simple Fracture is one
that was compound — the external wound
being healed it is reduced to Simple
Fracture —

December 13th 1809 Wednesday

Fractures

A Fracture is defined to be a complete solution of continuity of a part of a bone – but fractures sometimes occur, where the bone is not completely broken – bones are more brittle in frosty weather; bones are sometimes broken by muscular action, as the patella – When bones of the extremities are broken, there is great pain – this is increased by muscular action – the bone is frequently distorted in its situation and likewise shortened – by taking hold of a fractured bone, we find it to admit of flexion – there is a crepitus –

Fractures are divided into simple and compound
and compound simple
Simple fractures are those in which the bone is broken without any external wound or solution of continuity in the soft parts
Compound fractures are those, in which besides the bone being broken, there is an opening or solution of continuity in the soft parts –
When the external wound is small we succeed in union by the first intention, as in a simple fracture – we must use such means as will keep the ends of the bone together – If inflammation come on, we must bleed, purge &c – there is seldom any difficulty attending the reduction of

fractures – when the action of muscles opposes their re-
-duction, we must use means to relax them – this
is to be done by copious bleeding, until the patient
is likely to faint – then we can reduce the fractured
limb and keep it so by the aid of splints and ban-
-dage –

<u>Splints</u> are made of different materials – as
wood of different kinds – paste board – leather &c
I find the paste board for fracture of the fore arm
to be the best – they are used by soaking them first
in warm water – then apply them to the part –
and in a few hours they will be perfectly dry
and fit the parts perfectly – when we use
splints made of wood, they are to have linen pads
on the inside – the splints to be made extremely
thin – they can be made to fit transversely,
but not longitudinally – between these splints
and the limb, we must put tow, flannel &c
to fill up the interstices –

It often happens that we are not called to fractures
for many days after they occur – then, we find
the part much swelled – here we must use bleed-
-ing, purging &c – apply bread & milk poultice with lead water to
the swelled part – do not attempt the reduction
of the fracture until the tumefaction subsides

Rules for the Reduction of Fractures

Examine the parts daily until the tumefaction disappears — if there be much swelling use bandages so as to make moderate pressure — if they be applied to tight, mortification may supervene, and the fracture be changed to a compound one — bleeding is the best mode of evacuation — the position of the limb must be attended to —

The time necessary for the union of fractured bones is various and depends much on the constitution and age of the patient — young bones unite sooner than old ones — a fractured jaw is longer in uniting than a fractured limb —
In some constitutions bones never unite perfectly — in these cases it has been advised to cut down through the soft parts and saw off the edges of the bones — but this is a very injudicious practice —
Where the Tibia had been fractured and union had not taken place, I have directed the patient to move the limb as much as possible — thus fractured extremities are often made to unite —
A seaman had a fracture in the left arm above the elbow joint — his fracture did not unite & he had no use of the limb — in this state he remained 6 months — the connection between the ends of the bones grew ~~looser and loos~~ looser and

and looser — it bent as though a new joint had been formed — on examination I found the Os Humeri fractured about 2 inches above the Elbow joint — patient was admitted into the Penna. Hospital in May 1802 — I proposed to pass a seton through his arm near the fracture — this was done in Decr — it would have been done sooner but for the mans ill health — suppuration came and and he dressings were removed daily for 12 weeks — patient complained of pain in the part — in the May following the ends of the bone were united and the seton being removed, the arm got perfectly well —

another case was related of a fracture of the thigh & leg — the fractured leg did not unite — was treated with the seton — which was kept in 3 months — the ends of the bone united completely — one case related in which this practice did not succeed, though the failure appeared to be owing to the intemperate habits of the patient — the seton should be kept in at least 3 months to ensure success —

The operation for introducing a seton is not dangerous — any person completely acquainted with the anatomy of parts can do it —

The operation of cutting down to the bone and sawing away the ends, I have tried without success — it is a very severe operation — Boyer on the Bones quoted — he says it is a dreadful & painful operation &

it is practicable in the femur and humerus only —

December 15th Friday

Fractures —

Simple fractures unite by the first intention or by adhesive inflammation — the vessels ruptured at the time of fracture, lead into the fragments of the bone; the blood which they pour out coagulates — becomes vascular and thus callus is formed — this at first is full of vessels — In compound fractures, this blood, the bond of union in simple fractures, is lost — there is so much inflammation, that union by the first intention will not take place — instead of this there is suppuration — and the inflammation is sometimes so violent, that mortification soon follows — in compound fractures, when granulations arise, union commences — sometimes the external wound is an incised one, sometimes punctured and often contused with the bone broken into many pieces — Compound fractures are often attended with profuse hemorrhage — in first case apply a tourniquet — if the vessel can be seen, take it up with a tenaculum

The next object is to know wether we must amputate the limb or not — some are of opinion when the bone is much shattered and the soft parts greatly injured, that amputation should be

G The mode I have used in wounds of the post tib art. is to take a pair of common dressing forceps and at their end to put a small needle armed with ligature — pass this down under the bleeding vessel which you can generally feel pulsating — then catch the needle with forceps, draw it through and tie the ligature —

X But the anatomy of the parts proves that cutting the fibula could not affect the post. Tib. artery —

Posterior Tibial artery

performed immediately — I would amputate directly — I have seen lives lost frequently by hoping to save the mangled limb — it is allowed by all that when the hemorrhage cannot be stopped, amputation of the limb should be performed — if you would do otherwise, it is probable the patient would be exhausted with loss of blood — I believe it is always in the surgeons power to command the hemorrhage dry but has often succeeded — If the hemorrhage be so situated as it cannot be stopped at the orifice, perhaps we could succeed by pressure on a great artery leading to the wounded part — in a compound fracture of the leg, if the hemorrhage be great and the bleeding cannot be stopped by application to the wounded part, I would take up the Femoral artery

The amputation of a leg, in consequence of hemorrhage from the posterior tibial artery, has been performed — I believe the amputation was an incorrect procedure — the posterior tibial artery might be taken up — I have done so in a similar case and though it was difficult to command the artery, yet by care I succeeded — Mr Hey recommends a portion of the fibula in such cases to be cut away — extensive mortification has been thought to warrant amputation, but while this is progressing, amputation is an incorrect step — for the mortification will in most cases proceed above the stump — if it suddenly and entirely cease, you may amputate — when suppuration is very great and hectic fever violent,

no one would hesitate to remove the limb — very few cases of compound fracture occur in which we are warranted to amputate — when the external wound is removed, the fracture is reduced to a simple one — When there is a piece of bone protruding, cut it off — when the muscles resist the reduction of the bone, remove this obstacle by relaxing the muscles — extraneous bodies must not be sought after if the patient have great pain from it — when the bone is reduced and the wound small, attempt union by the first intention — with Emp. bdh. thus a compound is reduced to a simple fracture — I have succeeded in curing compound fractures of the arm, thigh and leg in this way — The inflammation of a compound fracture is often very great — sometimes it is high, that mortification follows — or at any rate, extensive suppuration — the bone often exfoliates — to prevent all these the patient should be bled freely — application to the part should be mild as bread and milk poultice — Surgeons have feared to use evacuations, saying that the patient would be sufficiently evacuated by great suppurations, never reflecting that the inflammation which first occurs, is the cause of after suppurations — when the inflammatory symptoms have subsided, these remedies are to be dispt — in case of mortification, use the remedies for this which have been already mentioned — In Compound fractures, bleed not until inflammation has commenced — the ends of the bones are to be placed in apposition —

the bones are to be placed in apposition —

December 18th Monday

Fractures of the Nose

A fracture of the bones of the nose in the front very seldom occurs – in fractures of the nose, the bone is generally ~~fractured~~ depressed – sometimes when the bones of the nose are fractured, symptoms come on which attend a depression of the brain – this is owing to a fragment being pushed upwards – the deformity which the fracture occasions proves the existence of the injury – if the fracture be not attended with depression, the remedies are simple – linen spread with some unirritating ointment may be applied – when the bone is depressed, we must use means to elevate it – this is easily done – when it is placed right, it is difficult to keep it so if the bone be much fractured – introduce a doseil of lint into the nostril directly under the fracture; cover the outside with mild Emp. abh. confine the patient to a low diet – the wound mostly heals in 3 weeks –

The Lower Jaw bone is sometimes fractured – this mostly takes place on one side of the chin; and very seldom, tho' sometimes, at the symphysis; the fracture of the jaw is generally at right angles with the bone – I have seen the condyles broken off – I have once seen the alveoli with the teeth quite broken from the jaw and with this the condyle of the opposite side broken off – The coronoid process of

the jaw is seldom fractured - it may be broken off by the force of a musket ball — the resistance to the reduction of fractures of the jaw is easily man-
-aged - the place of fracture can be easily felt-
the patient has pain on motion - the bones are somewhat displaced - you find the row of teeth not on an equality - the surgeon can make one part of the bone pass over the other - the treat-
-ment is generally simple - after the extremities of the bones are placed together, shut the mouth then pass a bandage round the chin, over the head - thus you keep the whole still - some have said it would be best to apply a piece of pasteboard below the chin - this is needless - when the condyloid process is broken off, there is some difficulty in reducing it exactly on account of the action of the muscles - in such cases we can sometime succeed by managing the front of the jaw - I know no other way we can do - a four headed roller has been advised, but a common roller answers very well - When the skin is very tender, drest it with soft diachylon, then apply the bandage - Sometime, in a fracture of the lower jaw, the teeth next the fractured part are loosened - it has been recommended to

remove them - you should not do so - drawing the teeth makes an opening into the cavity of the fac- -ture, thus changing a simple into a compound fac- -ture - I have known patients to die with compound fracture of the lower jaw - when the teeth are loosened place them in their proper situation and never extract them - while the patient is under this dis- -ease, give spoonviculals - very little conversation should be kept -

The Vertebra - are sometimes fractured - this is effected by some body moving with great velocity against the spine or by some violent motion of the spine - In every case I have seen, the fracture has been attended with dislocation - the spinal marrow has been depressed and a paralysis comes on of all the part below - the spinous and transverse process, may be broken without this effect - when the fracture happens above where the Phrenic nerve goes off, the accident proves fatal directly - when fractured lower down the patient survive 3 or 4 days - in fracture of the os sacrum the patient will survive for months but I have never seen a recovery - You can always on examination discover a crepitus - in every instance the rectum and bladder become paralytic - it is always necessary to introduce a flexible catheter, with a cedar plug in the end, so that the urine may be

When the fracture occurs above the 3d cervical vertebra death is instantaneous, because the diaphragm as well as the other parts subservient to respiration are paralytic — when the fracture is lower down, the diaphragm is the only ~~agent~~ active power in Respiration —

× Blood is sometimes effused into the cavity of the Pericardium — remove a portion of the sternum by a trephine and the blood may be evacuated —

drawn off 3 or 4 times a day — in making our ex-
-amination we should take care in moving the
patient — we should not turn the patient on the
belly, but on the side — in her former, suffocation
is to be feared — here accidents prove generally fatal —

December 20th 1869

Fractures of the Sternum — The sternum
is seldom fractured — I have never seen but
one case — when the sternum is broken and the
surrounding soft parts torn, inflammation
will be likely to come on — this is to be treated ac-
-cordingly — all that can be done in fracture
× of the sternum is to pass a bandage round so
as to keep the fragment in their proper place —
Fracture of the Ribs — these are often broken —
the fracture is mostly in the middle and is in a
transverse direction — sometime, the fragment pen-
-etrates the lung, by which wind is discharged —
pain is felt in the part and the Surgeon can easily
perceive a grating between the ends of the bone —
patients cannot make full inspiration without
pain — the treatment in this case is a bandage
passed round the body as tight as the patient
can ~~be borne~~ bear it, so that the ribs be not

the bandage is applied so tight as to prevent inspiration & expiration by the intercostals, the diaphragm is the chief agent

The fracture of a rib may be ascertained by placing your hand over the injured part and directing the patient to inspire — this will occasion a crepitus —

elevated — the bandage to be left on until union takes place — when pain supervenes — with coughing — difficult respiration &c. use bleeding, purging, low diet — barley water &c. — sometime without any fever, the cough is very distressing — thus violent pains brought on — under such circumstances, demulcent medecines are very good — how demulcent I know not can relieve coughing occasioned by a broken rib — In some cases the air cells are penetrated and air gets into the cavity of the pleura — this air often gets into the cellular membrane and thus the whole body is sometime inflated — thus Emphysema is formed — when we find this progressing the only remedy is to make an opening between the inferior ribs into the thoracic to let out the air — this may be done by a scalpel or a common tracar — this operation is not to be performed except when the cellular texture is likely to be inflated completely — compression by bandage is the best mode of preventing inflation of the cellular texture

Fracture of the bones of the Pelvis is a rare accident — I have seen the costa of the Ilium broken off — I never saw the os sacrum fractured — I have seen the os Pubis broken — by extending the thigh on the trunk we are rendered anxious as to the existence of the injury — a broad bandage is to be paced round the pelvis and the patient must remain still —

motion of the fragment gives violent pain — patient recover in about a month — when inflammation comes on use bleeding but purging is inadmissible on account of the motion occasioned to the pelvis — give laudanum

<u>Fracture of the Clavicle</u> most commonly occurs about the middle of the bone, though it sometimes takes place near the sternal, or humeral portion — when it occurs about the middle, the humerus falls down considerably — the patient to relieve pain always bends to the injured side — the sternal fragment remains in its natural situation, but that which is attached to the humerus falls down with the bone — the fracture slopes from without inwards and forwards — If you raise the humerus upwards, you bring the fragments into contact and by this means a crepitation is perceptible — the patient cannot rotate nor raise his arm to his head — In these accidents it is important to know the causes of displacement of the bone — the first is the weight of the arm — another cause is the action of the pectoral muscles by which the humeral portion of the bone is drawn forward — the old surgeons used to apply a bandage in form of the ~~letter A~~ figure of 8 —

but this bandage causing excoriation of the skin in the axilla, it was soon laid aside —

Desault has adopted a much better mode — he counteracts the action of the muscles by the following method — viz he places a pad made in the form of a wedge under the armpit, with the sharp edge ~~upwards~~ downwards — but before this the arm is extended — then a bandage is passed round the body in order to secure the pad — now lay the arm down with the elbow close to the side then pass a bandage round the body over the arm on the side where the bone is fractured — pass it once round the injured shoulder then under the arm of the opposite side — thus the pectoral muscle is completely counteracted — next a bandage is to be passed round the injured shoulder down to the elbow, then upward over and down again, to support the weight of the arm — then a sling is to be made for the hand — then it will be best to pass a bandage round the whole — before this put a piece of soft linen between the hand & the body to prevent the disagreeable sensation which would otherwise occur — before the exterior bandage is applied, feel the pulse and if it be lessened in force, loose the bandage, for

the pressure of the pad on the brachial artery is too great — examine the fracture every two or three days - and the bandages will require some attendance every day, because they often slip — in all cases of fractured ~~pt~~ clavicle even though the bones be not displaced, this mode of treatment is the best — by these remedies there will be little or no deformity —

The Scapula is very rarely broken — I have seen the acromion process broken off by heavy bodies falling on the shoulder — the fracture of the acromion is easily ascertained — the deltoid muscle draws the fragment down and makes a vacuity — by pushing the os humeri up, you can place the fragment in their natural situation — the management of this accident is similar to the last — When the angle of the scapula is broken off, the existence of the injury may be known by a space being evident between the fragments — there is also an motion a grating noise — in this case it is necessary to fix the arm, otherwise the soft parts will be much irritated and inflamed — if pain and inflammation come on give low diet, use bleeding, & the antiphlogistic remedies — the body of the Scapula is seldom or never broken —

December 22nd 1809

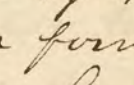
Fractures of the Os. Humeri - these occur in the middle of the bone or at its extremities - the existence of this injury is ascertained by the crepitus which is evident on moving the limb -
a bandage is to be passed from the hand up to the elbow and when extension and counterextension have been made so as to fix the fragment in their proper place, pass the bandage up the arm to the axilla - then 3 splints are to be laid on the humerus over the bandages one on each side of the arm and the other directly in front - then a bandage is to be passed to secure the splints - then the arm is to be laid close against the body with the arm and fore arm at right angles - a soft pad is to be applied between the patients arm and body - then a support must be made for the hand and arm - this has been done by means of a common hand kerchief, but it is much better to pass a broad bandage round the body and over the arm and hand - thus the fragments are kept at rest - this dressings may be removed in 8 or 10 days to see if union has taken place
all Fractures of the Os Humeri above the origin of the Deltoid muscle have been called fractures of the neck of the Humerus - these fractures are sometimes oblique and sometimes transverse - they are generally occasioned by bodies falling with violence on the limb -

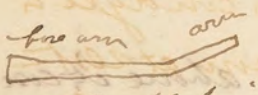
the inferior fragment is generally pushed in towards the chest and thus the fracture resembles a luxation — patient always complain of great pain — if he be a spare man, the fracture is easily ascertained by examination — sometimes a large Ecchymosis is formed and the space between the ends of the bone cannot be felt — but I have succeeded in discovering the nature of the injury in such cases by moving the arm and pushing the inferior fragment upwards, by this a grating noise will be evident —
When the os. humeri is dislocated and its head protruded forward into the axilla, there is a considerable cavity under the acromion scapulæ; in the fracture above mentioned there is also a cavity under the acromion, but it so very small, that the original rotundity of the shoulder is still preserved — thus you will be able to distinguish between luxations and fractures of the Os. Humeri — it is of importance to attend to the circumstance of the Ecchymosis before spoken of — by neglecting this, patients have been supposed to have received merely a contused wound, when a fracture had really taken place — thus deformity is often produced — you should always keep this circumstance in view and pay attention to the appearance of the shoulder — by extension and counter-extension the fracture is easily reduced — to do this, it is necessary to put a thick pad between the arm

the splints must extend above the upper end of the Humerus —

and Chest - this will prevent the inferior fragment from being pushed inwards - after the pad is fixed in this situation, secure the arm with 3 splints and proceed as directed before - this fracture is generally well in 5 or 6 weeks

The Os. Humeri is often fractured just above its condyles - the surgeon can easily know the existence of the fracture, by the crepitus which is evident on motion of the arm - the condyles of the Os. Humeri are frequently broken off - the fragment is so very small that a bandage and splints round the arm cannot fix it - the fragment will be moved by every motion of the fore-arm -

In the treatment of these two injuries it will be best to fix the fore arm by splints - The splints are to be of an angular form -  one leg of the angle to be laid on the humerus the other on the fore arm - one of these splints is to be fixed on each side of the fore arm - and one rather smaller but of a similar shape to be placed on the front, and one on the back of the arm and fore arm - Before putting on the splints then fasten the whole by means of a bandage is to be roped from the hand to the elbow - when the fragment is to be fixed by means of extension and counter extension - then rop the bandage up, covering the elbow completely, till the whole arm is covered - then lay on the splints as above men-



a splint in this shape is applied 20 days after the rectangular splint, in order to prevent the natural angle of the arm from being reversed, — when the injury is so great to the joint at first as that anchylosis will probably ensue then use the rectangular splints altogether for the arm if anchylosed to the arm in a flexed state will make a better limb than if extended —

tioned — then, fix these splints by means of another bandage passed from the upper part of the os Humeri or in other words from the upper part of the splint — then proceed downwards to the hand — thus the motion of the fore arm is completely arrested & merely the action of it on the fractured condyle is prevented, so that the fragment is now at rest — the limb is to be fixed against the trunk of the body and supported by a sling —

Without care be taken the limb will be disfigured this is when the external condyle is broken — In order to prevent this, after union had made some progress, I have succeeded better by applying straight splints to extend from the hand near to the head of the os Humeri — one is to be placed on each side and to be fixed there by means of a bandage — the splints are to be somewhat angular to favour the natural angle formed by the humerus and fore arm —

<u>Fractures of the Fore arm</u> — It often happens that only one bone of the fore arm is broken, and sometimes, both are fractured and at the same place — you can easily bend the arm at the fractured part, and by this a grating is perceptible — patients with this fracture cannot use the arm in any way — a bandage should be applied from the hand to the elbow — but it is necessary to be careful not to apply it too tight — else the space between the two bones might be filled up and the power of

2

formation be lost — ~~to~~ straight splints are to be in readiness, long enough to reach from the hand to the elbow — the hand is to be placed in the manner in which it is fixed when we shake hands — that is erect — the humerus is to be held still by an assistant — the splints are now to be applied on each side and a bandage is to be passed round them from the hand to the elbow — after these dressings, the arm is to be fixed in a sling — union mostly takes place in about 5 weeks the splints in all these cases are to be made of pasteboard —

It often happens that the Radius only is broken — the place of fracture is about 1½ or 2 inches above the wrist — patients lose their power of rotation — the surgeon can easily perceive a grating, by the smallest motion —

The Ulna is seldom fractured alone; it occurs when great violence has been given directly to this bone — the treatment of the fracture of one bone is similar to that of the other and exactly the same as when both bones are fractured —

the triceps extensor draws up the Olecranon

December 27th Wednesday

Fractures of the Olecranon process of the Ulna — this process is often broken off by falls - when it is fractured the patient cannot extend the fore-arm on the arm - if the arm be bent, a separation of the fragment is evident - if the arm be extended the surgeon can push the fragment from side to side, which causes a grating sensation - in order to place the fragment in a proper situation, extend the fore-arm on the arm - in order to secure them when fixed, apply a bandage beginning at the wrist, and passing it up to the shoulder - compresses are unnecessary - bind a splint on the anterior of the arm to prevent flexion - in 25 days after the dressings have been applied, it is necessary to remove them, to give the arm a little flexion, in order to guard against a stiff joint - care must be taken in removing the dressings not to give the patient much pain & not to break the fragment afresh, for as yet it is tender - when we apply the bandage in the first instance it is necessary to cover the olecranon entirely -

I have said the dressings must not be removed till 24 days have expired - this is generally the case - but if there be much injury to the soft parts or merely an incised wound you must remove the dressings daily or every two days, otherwise a

The great importance of the thumb & hands deter us from amputating it either to last reasons — even tho' circumstances are unfavorable, still let us endeavor to save it —

simple fracture may be changed into a compound one — when we remove the dressings in this case we must guard against flexing the arm —

The Bones of the Hand or Metacarpal Bones are not very often broken — the fracture of them is generally occasioned by violence done directly to the part — The management of this fracture is not very difficult — after reducing the fracture as well as possible, a bandage is to be passed round the hand — after this a splint is to be applied on the inside of the hand to cover the whole — this dressing is necessary if only one metacarpal bone is broken — a bandage must be applied round the splint to secure it —

Simple fractures of the fingers do not often occur — they do sometimes — I knew one case — the fracture was in the little finger of a boy and was produced by boxing — a splint was applied on the inside of the finger after the fracture had been reduced —

Compound fractures of the fingers are very common — they often occur under very discouraging circumstances — the bone is broken into many pieces and with this the surrounding soft parts are greatly lacerated —

When called to such fractures, we often feel tempted to amputate immediately —

In all these cases however discouraging, I would advise you to place the fragments in as proper a manner as possible — clean the wound of any dirt that may be in it — when the fragments are thus adjusted, retain them so with Emp. adh —

a splint of thin Cedar is to be applied on the inside to retain the part in a proper situation — the application of dressing to compound fracture of the fingers should be done with caution — great pressure is entirely inadmissible and always prove injurious as it will mostly occasion Gangrene of the part and thus the finger be entirely lost —

Fracture of the Femur — this often happens — and the management of it is more difficult than that of any other fracture — it is mostly broken at the middle or above towards the head of the bone — this fracture is often transverse, but most commonly oblique — the limb is always shorter by 3 or 4 inches — when the patient is laid on his back, the foot by its weight falls flat ~~on its side~~ with its outside downwards — the thigh is generally bent at the place of fracture and there is mostly a tumefaction of the part — patients cannot raise the extremity — when they attempt to do so, it occasions violent pain and sometime, convulsions —

If extension be made by taking hold of the foot of the fractured limb, the surgeon is often able to make it as long as the sound extremity — by this a grating noise will be evident — the shortening of the limb is owing to the action of surrounding muscles — they draw, by reason of their contraction, the inferior fragment upwards and the rotation of the

inferior fragment produced by the weight of the foot rolling outwards, occasions a displacement of the inferior portion inwards – different means have been devised for the management of this fracture — I shall notice only one — Mr Pott a celebrated Surgeon direct the body and lower extremities to be so placed as to relax the muscles — this he does by bending the thigh on the trunk of the body and the leg on the thigh — he directs the patient to be placed with the injured side downwards – by this method patients were unable to keep their position notwithstanding they were propped up by pillows and bolsters — they always complained of great weariness & the surgeon who uses this mode is unable to examine the length of the limb without moving his patient, which is a great inconvenience — On the contrary, when your patient is made to lay on his back in a straight position, you can make any examination that is necessary — this position is greatly preferred by patients the body rests at ease and is equally supported on all sides –

The objections that have been made to the last method are

1st The muscles of the thigh are kept constantly distended and contracted – this mode of reasoning appears plausible, but it is incorrect – for the muscles become in a short time habituated to this situation ———

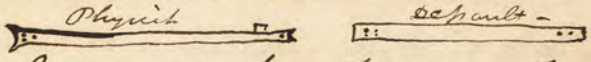
2 — When placed on the back, a considerable pressure is made on the heel, by which inflammation is produced on the part surrounding the Os. Calcis — this may be prevented by applying a piece of leather spread with Emp adh. on the heel — or a bolster made of a number of folds of flannel sewed together and an oval hole cut in the middle large enough to admit the heel —

For these reasons I greatly prefer the extended position — in transverse fractures if the fragments be properly apposed, they are so locked together that the muscles cannot draw the inferior portion upwards — But this is not the case when the fracture is oblique — the fragments will slip by each other — various means have been used to prevent this, but none are equal to the plan adopted by Desault — he proposes to maintain a permanent extension and counter extension by placing a long splint on the outside of the ~~splint, xxxx~~ limb extending from below the foot ~~to the~~ up toward axilla — a band is passed round the foot and secured to the lower end of the splint, and a similar one at the upper part passed round the tuber Ischii — thus counter extension & extension is kept up — as it is impossible in all cases to know whether the fracture is oblique or transverse, the method of Desault is always the best — before any dressings are applied, obtain a suitable bed — the bed should be narrow for if wide the sacking bottom would certainly sag —

~~and the~~ fragment be displaced — instead of a soft bed, procure a hair matrass — this affords an elastic and more uniform support than a soft bed — Sir Jas. Earle proposes, a bed for patients with fractured limbs — he advises a frame to be made to which the sacking is permanently fixed — in the centre, a circular hole is to be cut, about 13 or 14 inches in diameter — a hole of the same size is likewise to be cut in the matrass — a pad stuffed like the matrass is to be fitted to this hole — the pad may be removed whenever the patient wishes to perform an evacuation of the contents of his bowels — his buttocks are to be placed in the hole of the matrass — the matrass should have a sheet on it well tucked in, to prevent wrinkling — having prepared the bed, first lay down the tapes 4 or 5 in number about 1½ yd long, across the bed — over these lay the splint cloth, a piece of linen about 1 yd — square with one corner folded in towards the wounded leg — at the margin of this fold lay the splint for the posterior part of the limb — then lay across, a bandage of strips, sufficient to cover the whole length of the splint which is about 18 inches — it is necessary also to have two bandages for extension and counter extension — two silk handkerchiefs are the best things we can use — next, a splint is to be ready for the anterior part of the thigh — next two bags filled with chaff long enough to reach from

Besides this there is a bandage to be passed round the pelvis and over the splint to secure the splint to the body.

the as thum to the foot — next two long splints for the outside and inside of the thigh, the former to extend from the axilla ~~to the~~ below the foot, the latter to reach from the foot to the groin — one of the handkerchiefs is to be passed round the ancle and over the foot and tied at the sole of the foot — this is to effect extension — the handkerchief for counter extension is to go under thigh within the Tuber Ischii and the ends to be tied and held by an assistant who is placed at the patients head; besides these an assistant is to hold the knee — the surgeon having hold of the lower handkerchief is to extend and turn the foot inwards while the assistant at the other end is to pull, till the surgeon finds both the limbs to be of equal length — when the fracture is thus properly reduced, the bandage of strips is to be applied round the thigh — assistants continuing to make extension & counter extension — the external splint which I use differs from Dessault's in being longer and having a block of board projecting near the lower end —



the three upper holes are for the counter-extending handkerchief — the splints are to be rolled up in the cloth — between the splint & thigh, place the bags of chaff — then apply the anterior splint 18 inches long and secure the

whole by the tapes above mentioned — the limb extended is to be kept so by the handkerchiefs being fastened to the outside splint —

December 29th 1869

Dr Physick applied to one thigh of a servant before the class, Desault's splint, and on the other thigh that improved by the Doctor — The objection to the splint of Desault are 1st The counter extending bandage presses too much on the surrounding muscles — 2d This bandage tends to displace the superior fragment — In order to obviate these I made another splint, longer considerably than that of Desault — my splint reaches to the axilla and has a hollow in the end to fit the arm pit — near to this are the holes for passing thro' the counter extending bandage, which thus obviates the first objection, by the pressure across the great muscles being nearly removed or at least not by any means as great as that of Desault occasions — nor by this method is the superior fragment displaced as is the case with Desault's splint — the pressure of the counter extending bandage in my splint is directly in the direction of the femur, whereas in Desault's the pressure is transverse — the hollow in the upper end by placing in it a pad, answers for a crutch — another difference is that

All fractures of the thigh bone require at least 6 weeks – that of the head within the acetabulum requires 3 mos – in the latter case the union is ligamentous not bony –

near the lower end of my splint, a block is fixed on the inside - this was added by Dr Hutchinson decd and assists in the counter extension — If you wish to make the counter extension directly in the line of the body, join the counter extending bandage by thread or pins to the bandage crossing the pelvis — There is one circumstance which requires considerable caution - it is a habit with young practitioners to pull the bandages as hard as they could ~~can~~ - this presses on the soft parts of the foot and on the perineum - thus inflammation is brought on and frequently mortification - I have often seen sloughs fall out — you should never make more pressure than the patient can conveniently bear at first -

I have said that handkerchiefs are the best means for extension and counter extension - this is true - a leathern apparatus is also used - I will speak of it hereafter — when muslin is used, it is ~~best~~ best to wet the part with brandy every day -

The head of the os femoris is often broken - here the thigh is sometimes shortened - if the fracture fractured is in the acetabulum, it will be kept in its place by the capsular ligament and thus the limb will not be shortened — but in most fractures of the thigh, it is shortened and the limb turned over on the outside - by taking hold of the foot and turning it in, you will perceive a crepitus -

+ pass a bandage from the foot up to half way between the knee & thigh, having first placed a compress on the posterior part of the lower fragment — a splint to the back part from foot to ischium —

it bears a resemblance to a luxation of the thigh bone upwards and backwards — the fracture differs from the luxation because in the latter the foot is turned inwards and in the former outwards — when luxated, it is also shortened, but cannot be reduced without great violence — in luxation there is no crepitus — thus you can determine the nature of the injury — but I have mentioned a case in which the fragment is not displaced — you can certainly distinguish that the thigh is not luxated — if you find the patient cannot walk about, it will be best to apply the apparatus for fracture of the os femoris already mentioned, except the anterior and posterior splints —

In these fractures a great length of time is necessary — in that of the head of the bone 3 months is requisite — it has been doubted whether bony union ever takes place — but it certainly does —

The thigh is sometimes fractured at the lower extremity near the condyles — here it is mostly oblique and broken upwards and backwards —

the extremities of the bone are displaced not only by the muscles of the thigh, but also by those of the legs, and the ligaments — the Gastrocnemius displaces the fragment lower — it is best to place a thick pillow under the leg to support it — the other means above mentioned are to be used —

January 1st 1809 Monday

In Fracture of the Thigh a practice has been resorted to different from what I have mentioned - the patient is placed on his back and the leg is then bent on the thigh about half way to the thigh - an apparatus made into angular form is then made to place under the leg and thigh to maintain them in their bent position -  this may do in transverse fractures but not in those that are oblique - the pelvis by this method is liable to be crooked -

Fracture of the bones of the Leg - these bones are often broken together, sometimes at the lower and sometime at the upper extremity - when both bones are broken and the fracture is transverse, there is but little displacement - but if oblique the limb will be shortened - in transverse fractures the bones do not pass each other yet the fragments may be bent at right angles so as to cause a lump to appear anteriorly - the ends of the bone are drawn back by the action of the muscles - when both bones are broken, they are easily bent, patient has great pain and the place of fracture of the tibia can be felt by examination - by moving the part, a

× First procure a board to lay on the bed, on which place the pillow —

crepitus is sensible —
In transverse fractures of the bone where there is no displacement, the treatment is simple — when the parts are bent place them in their natural position, then apply bandages and splints to retain them so — to make extension one ~~person~~ person must pass a bandage round the ankle and to the sole of the foot as in fractured Femoris and counter extension is to be made by another person by taking hold of the knee — the surgeon by putting his fingers on the prominent part & the extension and counter extension being made the fracture is reduced — it is often necessary to place the two feet together to see if they are of equal length for there may be an injury done to the thigh bone which the patient did not perceive and which may produce a shortening of the limb — the dressing is as follows — 1st Procure a pillow, on this lay a bandage of strips, a sufficient number to reach from the ancle to the knee — then longitudinally place two splints 3 or 4 inches apart folded up three or 4 times in muslin — the splints to be of pasteboard and previously soaked — on this lay another bandage of strips — the extension & counter-extension being kept up, the first bandage of strips is to be applied — then the

splint are laid against the leg and retained there by the other bandage of strips — the sides of the pillow are to be placed against the leg and supported there by two pieces of board placed one on each side of the leg and fastened there by tapes — in each end of each board a hole is to be made for this purpose — the foot is to be supported by a bandage passed round it near the toes and the ends of the bandage are to be pinned to the pillow — some entrance is always necessary in these fractures to prevent the bed clothes from pressing on the limb — Basket boxes are constructed for this purpose — what answers well is a hoop cut in two pieces and the one being placed across the other they are tied in the middle

In all transverse fractures of these bones this dressing is only necessary — the heel must be attended to and covered with Emp. adh. thus inflammation is prevented — when the fracture is oblique the muscles draw the lower fragment ~~downwards~~ upwards, shortening the limb — here we must have some mode of counter extension and that used in fracture of Os. femoris might do — but Dr Hutchinson has made an improvement which is better — two splints two feet 6 inches long with a number of

A answer such a Compound fractions—

holes at the upper end and a mortoise at the lower end through which a cross piece is passed to admit of ~~at~~ decrease or increase in the opening — the upper end to be open — a bandage is then to be passed round the foot for making extension — the bandage of strips on the pillow is applied as before & a bandage passed round below the knee by which 4 tapes are to be secured, two on each side of the knee — these are passed thro the holes at the upper end for counter-extension and fasten the lower bandage to the cross piece for making extension — then fill up the interstices with bags of chaff placed between the splint and leg — this mode answers extremely well — but when the part have a disposition ~~the~~ to swell the upper bandages which secure the tapes increase the swelling — in this case the long splint for fracture of the Os. femoris is best — the bandage I have described answers well for fracture of the leg — you can examine the part without removing the splint or disturbing the fragments — when ~~the~~ patient is very restless it is found necessary to lay the patient's leg in a fracture box without the splint but with every other part of the dressing — this answers with answers fractures —

the box is one piece of wood to which on each side is hinged a piece of the same size — the side pieces are supported by means of tapes — sometimes the Tibia alone is fractured — in this case there is little displacement — in some of the fracture it is difficult to ascertain whether there be a fracture or not — to we may ascertain the nature of the injury 1st By the patient having considerable pain at the place of fracture 2nd there is no distortion yet a crepitus may be produced on motion of the part — the patient is frequently able to walk about because the ends of the bone are firmly drawn together — caution is requisite in examining this injury — The Fibula is sometime broken; it is most fractured just above the external ancle — it is most frequently fractured by a violent abduction of the foot — besides fracturing the fibula, the astragalus is sometimes luxated — when this accident happens, the patient is sensible of a cracking noise — he can walk but is sensible of something being wrong — by prepping the bone the surgeon can move the fragments — when the astragalus is luxated the sole of the foot is turned outwards — to reduce this it is necessary for one to grasp the knee & another the foot and by some exertion the reduction is effected and the astragalus returns to its proper place —

after this a bandage of strips is pasted round to limb - you must not use much pressure in the application of it else the interfemoral space be filled up and the power of rotation be lost — next apply one splint on the outside, another on the inside of the leg long enough to reach from the knee to a short distance below the foot — the reason for the splints extending below the ~~knee~~ foot is that the ~~foot~~ latter may be prevented from moving — by this dressing the patient gets well in 3 weeks — the patient should not walk about while this occasions pain — By this inattention I knew a case of fracture tibia protracted in the cure from 9 weeks to 9 months —

Jany 3rd — 1810 Wednesday

Fracture of the Patella — the patella is mostly broken transversely — sometimes longitudinally and sometimes obliquely — transverse fractures of the patella are occasioned by the violent action of the extensor muscles of the leg — oblique & longitudinal fractures arise from violence done directly to the part — when the fracture is transverse the patient cannot bend his leg — if it happen when the leg is bent the patient falls down — he is also sensible of a sudden snap in the part —

The Tenda Achilles is sometimes fractured
snap is heard - sensation like a blow, not much pain -
inability to raise the heal, except by the patient, tiptoes
a little - separation between the fragments is perceptible -
Dr Munro treated this with a piece of Russia sheeting
laced around the upper part of the leg to prevent
the action of the Gastrocnemius muscles - a buckle was
fixed to the lower end of this laced affair - a slipper
was worn with a buckle & strap behind - the foot
was extended and the strap fastened above - this
succeeded - but there was a knob left over the
wound - the foot is liable to slip about with this
dressing - Dr Physick has a carved instrument (see
page 75) which confines the leg & foot completely
extended - flannel is placed between this splint &
the limb - before the application of the splint a bandage
is passed round the calf beginning half way from the foot
& carrying it up to knee to confine the muscles -
the splint then is applied - then a bandage passed as
before above - then another round the foot & splint
not brought above the heel, except a few turns of the
bandage slightly; for if the tendon were pressed at the
place of fracture it would be forced to the tibia -
6 or 8 weeks necessary to cure - flex the leg on the
thigh to relax gastrocnemius muscles - treat fractures of
gastrocnemius muscle in same way only at first apply
bandage from foot up to knee - this heals in a
few weeks - see page 74

an examination you can discover the edges of the patella separate — the superior fragment is drawn up by the extensor muscles of the thigh — and the inferior fragment is drawn down by the action of the flexor muscles of the leg — by taking hold of the part the surgeon can perceive a crepitus — It sometime happens that besides the fracture of the patella there is a rupture of some of the blood vessels — this produces a swelling of the part immediately almost — though the patient cannot walk forward, he can nevertheless walk sideways & backwards — if he attempts to go forward he certainly falls down — the causes which act in displacing the fragments are 1st the muscles united with the Patella — 2d the leg if bent on the thigh displaces the lower fragment downwards — thus the fragments are separated

In the treatment of this accident, it is necessary to extend the leg on the thigh and flex the thigh on the pelvis — a compress must be placed over the upper fragment to counteract the action of the muscles of the thigh on this part — also a compress on the lower fragment for a similar reason — let the trunk lay flat on the bed and raise the inferior extremity in an extended position & retain it there — thus the tendency to inflammation is lessened; because the arterial blood will flow there with less force & the venous will more readily return

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a bandage is to be passed from the foot up to the lower fragment of the patella, the assistant holding the bandage, the surgeon places the fragment correctly and on the upper one he lays a compress - then without covering the lower fragment he passes the bandage under and over the compress, continuing the bandage up the thigh for some length in order to counteract the action of the muscles in this part - ~~then a carry~~ the bandage is returned down the thigh and covering completely the lower fragment*, it is passed down to the foot - in order to secure the limb in its extended position a pasteboard splint is to be applied posteriorly long enough to reach from the os calcis to the Tuber Ischii - the splint is bent into a hollow form to fit the leg and thigh - this is to be secured by a roller or bandage - the limb should be kept thus for 5 weeks - but if the patient complains of pain in the part, remove the dressings to see if there be inflammation - if this be neglected, suppuration might come on and an abscess be formed in the knee joint - if on removing the dressing there be inflammation - bleed, purge and use lead water to bathe the parts when the inflammation is gone, apply the dressings as before - Several methods have been used in fractures of the Patella - Dr Dorsey (adjunct P.) has used on several occasions the following splint -

When the ligament passing over the patella is not broken directly the fragments may not be separated ~~the first~~ immediately —

8 months are requisite to cure —

When the ligament is long, the limb may be rendered useful by frequently endeavoring to extend the leg on the thigh —

← the fragments should be held by one hand while flexion is made with the other —

A piece of thin board 3 feet long for adults and 3 or 4 inches wide, with two bandages a yard long, nailed across the splint 6 inches apart - to apply it lay a bolster on the opposite side of the splint to that which has the bandages - lay it under limb with the bandages under the knee - to retain the fragment, the lower bandage of one side is tied across to the upper bandages of the other side - this has done well in 3 instances - It seldom happens that the fragments of the patella can be kept in close contact - thus the union of the fragments is not bony - a ligament only is formed - if great care be taken this ligament will be short - but if inflammation supervene and the fragments be often disturbed the ligament will be long - thus the fragments will be separated from each other - yet the patient is able to walk - it is a fortunate circumstance that bony union is not effected, otherwise there would probably be an anchylosis - the extensor muscles of the thigh, owing to the elevation of the upper fragment of the patella, lose their power of contraction considerably - at the end of a month after the dressings have been applied it is necessary to remove them to flex the leg a little; but in this great care should be taken - the great danger to the surgeon in the first instance is his desire to retain the parts in contact - the great desire of this kind has often occasioned violent inflammation -

I next speak of Luxations

A luxation of a bone may be termed its displacement from its natural situation, by violent exertion &c – luxations are attended with pain

The rupture of the capsular ligament in a luxation is not painful except in some cases – when the pain is violent give opium &c – if the contraction of the muscles oppose the reduction of the limb, bleed plentifully – this is the best mode and was first employed by myself – if patient refuse bloodletting, perhaps nausea or vomiting might answer – after awhile if the luxation is not reduced, the muscles seem to accomodate themselves to their new situation – if the limb remain long without reduction, the bone seems to contract and the capsular ligament to grow less – when this is the case the reduction is very difficult and requires great force to be exerted – the rope and pully has been used, it must be fixed only to the joint luxated – I have employed a number of men to reduce luxations and I think this the best mode, because you can vary the direction of the force better than with the pully –

I have only seen it luxated forward
and but once —

January 5th 1810

Luxation of the Jaw Bone

The jaw bone can only be luxated by the condyles passing out of the cavity which they naturally occupy - they pass forward and the mouth is opened wide and continues so till reduced - it arises mostly from great yawning - I never knew it luxated by external violence - when the luxation is recent, no difficulty attends its reduction - but if it continues a longtime it is troublesome -

To reduce a luxation, the thumbs should be covered with a towel and placed over the last molares - the fingers are placed under the chin - the thumbs are to press down and the fingers to raise the chin - then the jaw is to be pushed back - thus the bone returns to its right place - luxation mostly occurs on ~~one~~ both sides, but sometime on one - the treatment is the same -

Luxation of the Clavicle are not often met with - the sternal extremity may be luxated forward, backward and upwards - in all these cases the mode of reduction is easy - the integuments are so thin that the surgeon can easily fix it - then the apparatus for fractured Clavicle

When luxated forwards the head of the bone is lodged between the Coracoid process of the scapula and anterior part of the glenoid Cavity — When luxated backwards the head is placed against the spine of the scapula —

The scapular portion is sometimes luxated — the extremity rises above the acromion scapulae — the parts are so thinly covered that the nature of the injury is easily ascertained — it is reduced by raising the arm — after this use the apparatus for the fracture of the Clavicle — Support to the arm must be continued for 10 or 12 weeks else it will be again luxated —

Luxations of the Humerus and Shoulder Joint often occur — the os Humeri may be luxated downwards and inwards

I have seen it luxated forwards but never backwards — it is most often luxated downwards & inwards — patients cannot apply their elbows to their side — by examination, a great depression is found under the acromion and if the finger be placed in the axilla, the head of the os Humeri is evident —

When the luxation is recent it may be reduced with great facility — I have succeeded without the assistance of any other persons — it is to be reduced by extension and counter extension — sometimes great force is required — the hands of some assistants are placed on the acromion scapula to make counter extension and the surgeon takes hold of the arm at the elbow to

make extension — the counter extension must be made with the same force as the extension — for there are instances on record where the whole superior extremity was torn off ~~with the~~ by two great force in extension — it is necessary in making counter extension to apply the force to the scapulas and the extending force just above the elbow — considerable force may be used and reduction not be accomplished & here venæ section should be used ad deliquium — thus the contraction of the muscles is counteracted — when the limb has been luxated for several weeks, the muscles appear to accommodate themselves to their new situation — the capsular ligament seems to have contracted and great force is necessary in the reduction — great bleeding is of considerable importance — when considerable force is necessary a bandage is to be fixed just above the elbow — but in the first instance to prevent excoriation, I apply a piece of buckskin, then I lay on a strong towel above the elbow and secure it there with a bandage — this is for the extension — for counter extension a long band with a part of it stuffed is to be

the bandage is with a view to prevent the displacement of the hand — or as chain without a buckle —

In cases where you great force might be necessary, prefer ~~do~~ bleeding part as delicy. amiss to violent exertions, for the latter lacerate the soft parts and thus prove bleeding to be a more humane remedy —

applied on the acromion – the counter-extension is more difficult than the extension – because the hand slips from the acromion readily – but it may be retained there by a small bandage passed round the limb and over the acromion – the patient is to be seated for the reduction – the surgeon takes hold of the hand and elbow and rotates the limb to break away the adhesion of the capsular ligament – 4 persons should make counter extension and as many for the extension – when the head of the humerus is brought away from the arm pit, the elbow is to be pushed directly to the side – previous to this it may be necessary to put the hand in the axilla to push the head of the bone out, or to place in the arm pit a compress which acts as a fulcrum the arm being the lever –

Pulleys and ropes are sometimes used – the great disadvantage of these is, you cannot direct the force; this is obviated by employing men – In this way I never saw a case fail –

In the Pennsylvania Hospital this winter, there was a case where the bone had been out 13 weeks – it was reduced –

+ he cannot bear it further —

January 8th 1810

I told you in the last lecture that the Humerus had been reduced after being luxated 13 weeks; there are cases on record of luxation being reduced after being displaced 4 or 5 months — Dr McKenzie informed me of a case of luxation of the Humerus which had existed for 5 months — bleeding ad deliquium was used and reduction was effected — what is extraordinary no swelling followed — attempt ought to be made at reduction let the bone be displaced ever so long —

Luxation of the Bones of the Fore arm and Elbow-Joint

There may be luxated backwards and upwards or laterally — luxation forwards is almost impossible — in this luxation the patient cannot straighten his arm, but it remains half bent — the joint of the bones is disfigured — you can feel the hook like process of the Olecranon above the condyles of the Humerus — Thus the existence of the accident is evident — to reduce this luxation, an assistant should seize the arm above the elbow to make counterextension — another to make extension should seize the bones of the fore arm — the surgeon then takes hold at the elbow joint — the fore arm is pulled backwards to dislodge the Olecranon process —

Luxation of the Second bone of the thumb on the first is trouble-some - extension & counter tension do not answer well - Cha Bell recommends to introduce a couching needle thro' the soft parts and divide the ligament on the outer side of the thumb near the joint

this being done the assistant is to bend the arm to the side - cloths wet with Spirits are to be placed on the part and the hand put in a sling - when the luxation is lateral the reduction is the same - Boyer on luxations, says it is impossible to reduce a luxation of the fore arm after being luxated 13 days - this is not the case - I have reduced them after being luxated a month

Bones of the Hand.

there may be luxated forwards and backwards - when the wrist is luxated forwards, there is a prominence on the inside of the wrist and the hand cannot be bent - when the luxation is backwards the hand is bent downwards and cannot be moved upwards - these are easily reduced by mere extension and counter extension - after reduction, apply ~~the~~ a splint on the inside of the hand and fore arm, otherwise some inconvenience would follow as swelling &c -

Bones of the Fingers are sometimes luxated - the accident is always apparent, and admits of easy reduction - simple extension & counter extension is all that is necessary - some of the luxations of the thumb are not so easily reduced, but with care they may be managed -

The Thigh Bone and Hip joint

Luxations in here may be upwards and backwards or downwards and forwards - indeed they may be luxated in every direction - The luxation upwards and backwards is most common - of 9 cases which I have noted 7 were upwards & backwards - when the thigh is luxated upwards and backwards the limb is always shortened - there is a loss of motion - the leg is bent at the knee joint - the toes point in and cannot be turned out easily - it is impossible to make the limb as long as the other without using force enough to reduce it - when the luxation is recent it very easy of reduction - I reduced one luxated thigh bone after being displaced 13 weeks - I shall now give the method of reduction in luxation upwards & backwards - in order that the muscles should be relaxed, the patient should be placed on his side, the leg bent on the thigh and this on the pelvis - a long band is to be passed between the thighs and passed upwards over the head and fixed to the head of the bedstead for the counter extension - a strong towel is to be fastened above the knee by means of a roller - This towel is for the extension -

a pulley may be fastened to the towel to increase the force - here pulley answers well, because it is not necessary to vary the direction of the force - a number of men will answer when the pulley cannot be had - by rotating the thigh and continuing the extension and counter extension the ~~bone~~ head of the bone is dislodged and it slips suddenly - when it returns to its place there is a sudden noise - the limb gains its natural size - if this will not succeed, the surgeon may pass a band under the upper part of the thigh, and round his own neck - by raising his head the extension and counter extension being made, the reduction is often effected - in the same way luxation upwards and forwards, is to be managed -

January 10th 1810

Luxation of the Femur upwards and forwards - this seldom occurs - some years ago we had a case of this kind in our Hospital - the Case is related in Dr Coates Medical Museum - the head of the bone was lodged in the hollow behind the Pubis and before the Acetabulum - a tumour was felt in the groin - the knee was bent outwards - the luxation was reduced by a strap passed between the thighs over the perineum with a soft substance intervening and carried

+ in fat people it may be below the knee —

Suppose the right thigh to be luxated counter ext & extension made as before — a long hand stuffed in the middle is applied round the pelvis with the stuffed part on the right side, the ends carried over to the left and fixed to a firm place — this secures the pelvis and the transverse Counter extens in — the extension transversely is then made by passing a band round the right thigh & carrying it over to the right side & ~~fixing it~~ giving it to assistants or applying a pulley to it — this is used to dislodge the ~~bone~~ head of the bone —

forward and fastened behind the head to a permanent place - a strong towel was fixed by bandage to the ~~leg below~~ thigh just above the knee for making extension and a pulley fastened to the towel to increase the force - great bleeding was used before reduction was effected - I will show the mode of treatment - the injured limb is laid on the side of the bed - the strap is to be passed between the thighs for counter extension - then for extension a towel is fastened ~~below~~ above the knee with a bandage - a round band is passed round the pelvis at the injured side and the ends being carried transversely over are fixed to a permanent place - then a band is passed round the upper part of the thigh across it, and a pulley fixed to it in order to pull the head of the bone from its situation - while this is going on the surgeon is to rotate the limb - to prevent the abduction of the thigh the knee is pushed in and force is exerted on the band across the upper part of the thigh - Desault says the counter extending band should be fixed to the sound side - I have never seen but one luxation of this kind - the next species of luxation is downwards and forwards - in this the toes are turned out and the limb is made longer -

Patients can make no motions with the limb - sometimes you can feel a tumor inside of the thigh - the head of the bone is in the foramen thyroideum - Cases read from Hey's Surgery - he relates a case of luxation forwards and downwards where the limb was lengthened 4 inches - this must have been owing to the bones of the pelvis on the injured side being pulled down - this luxation he reduced in the following manner - he laid the patient on a table with two holes bored in it wide enough apart to admit the pelvis between them - over the pelvis blankets are laid and a strong band is passed over and your thro' the hole, and fixed to the floor - the counter extending bandage is passed between the thighs as before directed - a band is to be passed round the thigh and over the surgeons neck to raise the head of the bone - the extending bandage and towel is applied as before directed - by this means reduction is effected - another method is used - ~~one end of~~ a splint made in the form of a rake 10 feet long and 10 inches broad, at one end was fixed with the small end against the small and the broad end between the thighs - this makes the counter extension - some substance must be placed on the scrotum to protect it - then for extension, a towel is passed over the thigh just above the knee &

secured there with a bandage - and to raise the head of the bone from the foramen thyroideum a rolling pin was passed between the thighs & so managed as to raise the head of the bone - thus the limb was brought to its proper place - immediately after reduction the limb will be found 1½ inches longer than the other one, but this gradually wears away

Luxation backwards and downwards might be reduced in the same way - in this case the toes are turned inwards - I never saw one of this kind - One direction I wish to give you respecting some circumstances which often lead into error -

Persons suffer contusions of the hip and the leg & thigh lays down flat and rotation cannot be performed - the limb is longer than the sound one - this has occasioned embarrassment - I have seen consultation called on such occasions - when the limb is lengthened it is only by the drawing down of the pelvis on the injured side - a person without any accident can lengthen one thigh so as to give this appearance - always guard against this mistake - lay a stick across the body from Ilium to Ilium and you can easily be satisfied —

+ it is outwards always —

+ 3 months rest is requisite to cure this perfectly —

O by rest this gets well in 15 days

+ also backward - in one case the foot is shorter, in another it is longer —
O this accident is seldom cured in less than 9 months —

January 12th 1810

Luxations of Bones of Leg and Knee joint — This luxation is not frequent — I have seen but two cases — the head of the tibia was turned out — a great deformity is induced; you can plainly feel the internal ~~head~~ condyle of the os femoris — it is easily reduced by mere extension and counterextension — it is difficult to retain the bones in their place — the splint for fractures of the Femoris should be applied —

In reduction while the counter extension and extension is going on a bandage is to be applied wet with lead water or something of that kind then Default splint — if there be great pain, use bleeding — if there be great laceration apply a soft poultice —

Luxations of the Patella may take place towards the inside or outside of the limb — the former is very rare — when the patella is forced over the external condyle of the os femoris, the patient cannot bend the leg — the patella will appear laterally — to reduce this the leg is to be extended ~~bent~~ on the thigh and the thigh flexed on the Pelvis to relax the muscles — then the reduction is easy —

The Foot is sometimes luxated by violent abduction — this is reduced by counter extension & extension — I have never seen the astragalus thrown inward —

There is another luxation in which the tibia and fibula are thrown forward — this is reduced by extension and counter extension — it is considerable time before

There is an affection of the knee joint which Mr Tley calls a derangement of the internal parts of the knee — it is produced by displacement of one of the semilunar cartilages or of one of the crucial ligaments — to remedy it, the patient is placed on a table with his ~~for~~ legs projecting — the surgeon grasps the foot & also the upper part of the calf of the leg — he extends and at the same, forces forward the upper part of the tibia, pushing likewise the foot backward —

+ In cases of sprains Latta recommends strongly the application of leeches to the part — he says the swelling and pain are thus easily removed —

the patient can use the limb — Sometimes patients cannot walk for many months — after the recurrence of this accident the patient should not walk for some time — a fracture box should be used and a bandage kept round the foot
There is a compound luxation of the ancle joint in which the bones of the leg are pushed outwards tho the skin and with this the astragalus is often thrown out — Some amputate directly on account of the great laceration — but I think if the bones are placed properly and the wound dressed correctly, the wound will be removed and the patient get well —
There is an accident called Sprain to which we are often called — one side of the ancle is lacerated and there is some swelling in consequence partly of ruptured vessels — this is very painful — it differs from luxation in the joint in admitting of motion — a stream of cold water over the part every 2 hours is best — in 2 or 3 days the part should be wrapped in a cloth and kept at rest — this if applied in time succeeds — but the accident is thought by many a simple one and thus often proves very injurious — persons should continue as much as possible at rest — a case related of a young Lady with a Sprain who neglected it and the result was an ulcerated joint —

× In old people it comes on like Rheumatic pains — children show it in awkwardness of gait —

× The buttocks become flattened and the great trochanter is easily felt —

hectic fever came on and finally death —

Sprains in the Wrists are to be treated much in the same way — keep the part at rest — a splint is to be applied to the part and kept there until the part becomes well — sometime after cure the part swells, here a tight bandage & friction are very beneficial —

Disease of the Hip-Joint — the English gave it this name — it is most common in young people, but may attack old people — the first symptom is weakness and afterwards limping — if the limb be examined we find it diminished in size — there is seldom much pain in the commencement — but soon pain is very severe — pressure in the vicinity of the great trochanter occasions great pain — children will be seized with violent fits of pain and scream out — sometimes the pain is felt just above the knee, this wearing a very delusive aspect — whenever a patient complains of the knee without any appearance of disease, suspect the hip — you will find the diseased limb longer than the sound one — this is owing to the patient bearing solely on the sound limb — if you examine, you will find a lateral flexion of the spine — this often deceives surgeons — and has been supposed to be disease of spine —

× This is owing to a tumor filling up the acetabulum —

o ~~The~~ Abscesses succeed chronic inflammation in some cases and the matter exists in the cellular membrane and the tumor occasioned thereby is not painful — but the tumor in acute inflammation is very sensible —

you can be certain of the nature of the disease in this respect by laying the patient across a table the Spine will become straight - not so in diseased vertebræ — if the disease be not relieved the limb after a while becomes shorter owing to the displacement of the head of the bone & there will actually be a dislocation upwards —

Sometimes inflammation comes on in the part, abscesses form - hectic fever comes on, night sweats and finally death — sometimes the inflammation subsides, the disease is cured, but the limb remains forever after deformed, from anchylosis — The nature of this accident at first is difficultly ascertained — the acetabulum is sometimes filled up with cartilage and thus the thigh is dislodged and the muscles draw it up — the disease appears generally to take place in the Acetabulum more than on the head of the Femoris — the most frequent accasional cause of this disease is a fall on the great trachanter. the head of the thigh bone is forced violently against the acetabulum and the parts are inflamed — the misfortune is that patients are seldom placed under the hands of physicians until great mischief ~~was~~ is done — the remedies I have used were close confinement & rest — the vegetable diet — I give purges so as to operate 3 a 4 times every day —

× I have seen children pine heartily under the use of purges —

Q — I do not know that this mode of practice is very beneficial —

The purging plan combined with rest, is, in the early stage of the disease, the most successful mode of treatment —

× I use Jalap and Cream-tart — patients who are young like this-bert — I put the patient in warm
o bath with salt in it every day — when the in-
-flammatory symptoms were great, I bled and applied leeches — but if there was little inflam-
-mation I introduced a seton near the great tro-
-chanter — to maintain rest I have a splint ~~fo~~ made to fit all the diseased side of the body —
a carver can make it easily — the splint is se-
-cured by bandages —

January 15th 1810

Injuries done to the Head by external violence
When the scalp receives a smart blow — the part generally swells, owing to a rupture of the blood vessels — a tumour is formed circumscribed by a margin which resists pressure — the part ought
(not to be opened unless the patient after awhile com-
-plains of symptoms of compression on the Brain —
In this case an incision should be made directly —
The best application to this tumour is cloths wrung out of ~~cold~~ water — Mr Pott recommends Sol
Sal Ammoniac — I never used it — the cold water answers well — in 7 or 8 days the effused blood will be mostly absorbed — but sometimes this is not the case — a fluctuation will continue long — under these circumstances it will be

o If stitches be used let them be ½ inch apart —

+ It is of importance that the Emp. Adh be not applied too tightly for by rendering the scalp tense mortification may be produced —

When the Dura mater is punctured & brain protrudes, the disease is called Fungus Cerebri —

best to make a puncture with a lancet — then the contents are discharged and patient get well — the patient in these accidents should be kept on low diet

The scalp is subjected to all the different kinds of wounds already mentioned — incised wounds are to be cleaned of dirt, the hair shaved & + 6 wp Ith — applied — Contused wounds are best treated by moist poultices moderately warm — these to be kept on till suppuration comes on — when granulation arise strips of plaster may be used to bring the edges together — sometimes the scalp is torn from the cranium in a violent manner — in such cases, the scalp is often contused & lacerated — the older surgeons would take away the torn scalp at once, because they said abscesses would otherwise form — whenever the scalp was in this way they cut it off — Mr Pott advises to replace the flap after being cleaned — and if abscesses should form they are easily ~~cleaned~~ — removed — thus the cranium will retain its natural covering — This practice should be followed to the bone, be entirely denuded —

After a wound has been inflicted on the scalp, we often find it much inflamed and this

When a part of the Cranium has been denuded & thereby dies - if both tables are dead, the bone becomes loose & should be taken away directly for granulations arise which make it firmer every day —

inflammation often extends over the face — This inflammation is mostly found in punctured wounds — the inflammation may be removed by the application of a Blister — use bleeding, purging and pure low diet — Sometimes fever is great and delirium ensues — this calls for copious evacuations — the aponeurosis of the cranium is often seized with this inflammation —

There is often from injuries of the scalp, a pain remaining a long time of a very distressing nature — I saw a case of this kind — it was cured by making a crucial incision on the part in which the patient felt the pain — I saw another case in which the wound was over the os. frontis — patient was bled for the wound, leeched, dieted &c — the pain ~~followed~~ continued and I relieved her anxiety by a crucial incision but did not relieve the pain — It continued as bad as before — patient took Opium, Blisters were applied without any benefit — Bark did no good — Cicuta, Mineral solution did no good — after 3 years pain she was advised to go to the country which gave great relief — but when she gets cold, she always finds it return — another case related, in which the crucial incision gave some relief —

sometimes nausea & vomiting —
pupil sometimes dilated sometimes
contracted —

Last Summer I saw a case unlike any related by authors — a piece of the Frontis was depressed and the violence of the blow killed the dura mater, so that it came away entirely as far as the bone was removed — fungus cerebri followed & death —

0 See cuts on largest entry of Dura Mater —

Of Injuries of the ~~Brain~~ Cranium accasioning Compression of the Brain —

Stupidity, drowsiness, loss of sense ~~are~~ the symptoms — loss of voluntary motion, stertorous respiration

The cause is ~~com~~ depression of the bones at some part, rupture of the vessels of the dura mater &c. Though a fracture of ~~the~~ Skull has these symptoms, yet other accident will give such appearances — I saw a case of depression of the Scalp without compression of the Brain — when vessels are ruptured compression of the Brain does not always follow — I have seen fracture of the Cranium, in which no compression of the Brain took place in consequence of the fracture but on account of the collection of blood from the ruptured vessels —— A mere fracture of the Cranium is by no means productive of the symptoms of Compression of the Brain — When the Skull is depressed accasioning compression, the part should be elevated ~~and~~ or taken away — this is done with a Trephine by making a hole in the round bone adjoining — in such cases, the treatment is simple — Sometimes compression of the brain ~~Brain~~ follows when there is no mark of injury to the scalp — Mr Abernethy says that in such cases it is best to make a perforation of the parietal bone at the anterior, inferior part —

Inflam may follow Concussion —
2 a contusion without laceration — or
3 fracture with a ~~without~~ depression

in the end convulsions —

Mr Pott calls this a fungoy tumor —

Mr Pott ascribes this Inflammation to the death of the bone — but it is owing to the violent percussion the dura mater receives by the blow on the bones — this induces Inflammation —

+ without or without a fissure or fracture —

Injuries of Bones of the Head occasioning Inflammation of the membranes & Brain

This may take place without depression of the Brain — The patient after appearing to do well for several days becomes restless, has flushed face, high pulse, convulsions, delirium and coma — these symptoms often occur in consequence of contusion of the scalp — when these symptoms supervene, you find the parts are tumified and a fluctuation is felt — you should open this and you will find the cranium denuded and if you wipe it, you find it of a changed colour — scrape it and no blood is evident and it appears dead — if you perforate this with a trephine, you find it separated from the dura mater in which pus is evident — sometimes besides this, pus forms between the dura and pia mater and often in the brain itself — it is well for the patient if the pus be only between the cranium and dura mater — both cases are dangerous and I never saw a recovery after suppuration had taken place — Another cause occasioning inflammation of the brain is a lacerated bruised wound of the scalp — the patient will appear tolerably well until the above symptoms occur — after this the granulations on the scalp lose their good colour and discharge fœtid sanies —

When a piece of bone is perforated in always elevate it —

The symptoms of Inflammation of the Brain generally appear in 7 days after the receipt of the ~~accident~~ Injury — but it is sometime much longer before the symptoms appear — I knew one case in which the symptoms did not appear till a year after the injury ——

0 pinching gives no pain —
extremities are cold —

+ matter in the second stage when the extremities are warmer, respiration & pulse better —

this Inflammation sometimes follows a simple fracture without depression, but it happens also when depression is existing — when none of these symptoms accompany a fracture of the bone, it has been a question whether to perforate the bone or not — Pott advises to do it — and I have followed the practice — I have determined never to perforate in such cases except symptoms of depression or some of the symptoms above mentioned are present —
In all these cases venæ sect is proper, purges, and low diet — if much inflammation is present carry the evacuating plan as far as practicable — after this the patient will be ready for the operation of the Trephine —

Concussion of the Brain — Mr Pott says the patient is mostly restless, sometimes there is delirium, hard pulse tendency to vomit and is injured by strong light, loss of sense, spasm, palsy in some part — as the effects of concussion diminish sense returns — In the first stage of concussion very little says Abernethy can be done — I think in the first instance cold water should be applied to the head — the pulse is low at first but rises and blood may be taken from the arm — apply a Blister to the head — if inflammation supervene bleed very extensively —

Where convulsion produces sudden death
dissection shews no sign of extravasation —
for the actions of the system are directly
suspended —

blood is always extravasated in the brain as appears after death on dissection, of course stimulants or wine &c are very improper —
In a case of this kind at Penn.a Hospital, the stupor continued a long time after the receipt of the accident and mercury cured it entirely — it remains now to shew you the manner of using the Trephine — you must first be provided with a very strong scalpel with an ivory projection at the end of the handle — but another instrument is in use called a Raspatory — for the purpose of scraping up the pericranium — the end of the handle of the scalpel answers as well — the next instrument is a Perforator for the purpose of making a hole through the external table of the cranium for the purpose of receiving the point of the Trephine — the next instrument is the Trephine which is a circular saw with a pin in the centre to fix it — a small brush is necessary for cleaning the teeth of the Trephine — a tooth pick is necessary to ascertain if the saw has cut thro' any part — next an Elevator is necessary — a pair of Forceps is necessary in some cases to remove the piece of bone which has been divided by the Trephine — the Tenticulum is used also but is of no importance —

+ previous to all this, shave the head

There is another instrument I recommend you to have - saws of different sizes to remove large pieces of bone from the cranium - this is called Mr Heys saw and is described by him - old surgeons used what is called a Trepan but this works too quick and is dangerous — needles, ligatures, tenaculum sponges, basin of water should always be ready to perform this operation - The scalp in wounds where the Trephine is used, is often torn off - an incision thro' the scalp down to the bone is necessary - if necessary make, a crucial incision, but never cut off any of the scalp - after this incision, separate the pericranium from the skull, with the end of the scalpel ~~handle~~ - now any arteries cut in this incision are to be tied unless you wish them to bleed - next the Perforator or the point of the Trephine is to be used to make a hole thro' the external table of the cranium — the groove being large enough the point of the Trephine is to be drawn in so as not to go beyond the teeth - the saw is to be brushed frequently or wiped with a cloth if no brush be at hand - after the Trephine is used a little while, use the tooth pick to see what depth you have gained in the skull - after having sawed thro the first plate it is

head

it is right to use the Elevator to see if the part be moveable – when you find with the Tooth pick that one part is cut thro', take care, and do not press on that part otherwise you would depress the Brain – cut down first only to the vitreous plate and remove the external table with the elevator – if an angular fracture exist along side of the hole made by the Trephine, use Hey's saw to remove it ——

——

——

do not cut thro' with the Trephine but break the vitreous plate with the Elevator ——

After trepanning if all the blood is be removed from the meter apply scalp and and then poultice — but if blood remain and cannot be removed do not close the scalp but apply the poultice —

If the ~~frontal~~ longitudinal sinus be wounded stop the Hemorrhage by means of a defil of lint — When the ~~the~~ great artery of the dura mater is wounded never take it up unless the dura mater be completely opened — here it will not increase the danger — where the dura mater is not opened, a defil of lint may be passed between the artery and the Cranium or if the artery runs in the bone, use a plug of cedar as in similar cases —

After removing a piece of bone if the dura mater be pierced either by bone or by your knife, lay the scalp over it and union sometimes takes place which closes the cavity of the dura mater which prevents inflammation —

+ every day for 5 days —

January 19th 1810

The older surgeons feared to trepan over the frontal sinus, but it may be done with safety — we ought never to refuse an operation over the frontal sinus — when pus or blood is situated between the dura mater and bone, the operation I have mentioned gives it an outlet — but it sometimes exists between the dura matter and pia mater — on removing the piece of bone the dura mater will rise and not fall and the motion of the brain will not be seen on the denuded part of the dura mater — the pulsation of the arteries will not be evident there either — under these circumstances some surgeons open the dura mater to evacuate the blood or pus contained — this opening is very dangerous — I have seen the opening made, but never saw a recovery — but some cases are related where recovery followed — inflammation always follows and in consequence of the great danger I would not puncture the dura mater — but I would bleed, purge and blister freely — I had a patient with a fracture occasioning inflammation of dura mater and I bled him till he fainted 4 times and purged and bled him — after you operate with the trephine all is not done — you must confine patient to a low diet, bleed and keep the bowels always open — over the part the best application is a bread and milk poultice — lint should not be used, the poultice is much better — in case, where there is no reason to suppose extravasated blood or pus existing it

+ mercurial cathartics

will be best to unite the scalp with Emp adh — Potts work on Injuries of the head should be read — abernethys work —

Diseases of the eyes

Inflammation of the eyes ~~lids~~ may be in the lids, tunica conjunctiva, globe of the eye, cornea & -Rece is at first little pain — at first bleeding + from the arm is good and low diet — Spt Camphor may be used on the eyes — the eye is sometimes shut and patients cannot open ~~the~~ — here disease is in the eyelid — the edges of the eyelid are diseased often — an acid fluid is discharged and a slight degree of Inflammation on the adnata — I believe the disease consists in ulceration round the roots of the hair, & thus resembles Tinea Capitis — Spermaceti oil is often used in this disease — I have used it with success — the remedies mostly used are Ungt Citrini & Ungt Mercurial — it is melted and put between the eyelid before going to sleep — I have used Ungt Picis and it is an excellent remedy — I have sometimes removed the Cilia with Forceps — I have also applied Leeches —

The tunica Conjunctiva is sometimes affected — the vessels which formerly carried white fluid now carry blood — this gives great pain — sometimes the inflammation is only in one spot — the eye is very irritable and we are hardly able to get a view of it — this Inflammation travels to the Cornea rendering it opake and producing a film — the cause of this

Never use astringent collyria until inflammatory symptoms are greatly abated —

sometimes external wounds, acrid matter, strong light intoxication, venereal disease — I knew a young man to get this disease by washing his eye with his own urine — he had gonorrhea & it affected his eyes — suppuration took place in the cornea —

The Globe of the eye is inflamed often — it is attended with pain & sensibility to light — when it is situated in the anterior chamber, suppuration always follows — if not soon relieved — the pupil is fixed in all degrees of light — pieces of sand often barter on the cornea, they may be removed with the point of a lancet — if there be any extraneous body on the cornea or under the lids, wipe it out with a rag, or inject milk and water or turn down or up the lid with a probe — to cure inflammation bleeding is one of the principal remedies — we may use cups on the cheeks, and leeches round the eye — we also open the vessels of the conjunctiva — we also use purging — I prefer Mercurial Cathartics — to the eye, the best application is milk and water — when the inflammatory symptoms are moderated, blisters are good over the eye — and behind the ear or on the head — Mr Ware says Laudanum dropt in the eye is very good — but not till inflammation is reduced — I have used Sea water with great advantage as a collyrium — this I have used in great inflammation — it is an excellent remedy — when pus forms I have opened the cornea, as in cataract — pus will be sometimes absorbed, but otherwise open the cornea — When inflammation is deeply seated the above remedies as bleeding, purging &c freely — I have done it

without any regard to the pulse, but to the state of the eye — confine the patient in a dark chamber, vegetable diet - use no spirits - sometimes issues are put in the arm to create depletion — I have told you that opacity of the cornea often follows - mercury to excite salivation is very useful - dropping mud into the eye &c — when the opacity continues the eye may be relieved by an operation -

Inflammation in the anterior chamber often close to pupil - this requires an operation

When a part of the cornea opposite to the pupil is opaque open the pupil behind a transparent part of cornea —

Ungues is a thickening of a part of the conjunctiva and sometimes requires to be dissected off —

Trichiasis consists in an inversion of the cilia so that they rub on the cornea & keep up inflammation - to cure this cut away a part of the tarsus completely from one canthus to the other — some recommend applying caustic lunar (nitras argenti) to the tarsus —

+ at the puncta lachrymalia and sometimes down the duct to the nose —

Sometimes astringents applied externally effect a cure — also lead poultices —
Syringes have been used to inject in the puncta lachrym.

o it is best to open the tumor rather than let it burst because the scar unto then be left and we can then introduce a probe to examine the state of the duct —

January 22 1810

Fistula Lachrymalis

It is impossible to be acquainted with this disease without a knowledge of anatomy — the ductus ad nasum is liable to structure whereby the tears are prevented from passing and a tumour forms in the internal canthus of the eye — which being pressed a matter is forced out — the swelling is removed by pressure — if the eyelids be closed at night it may be prevented afterward by some soft substance placed between them — sometimes round the tumour there is great inflammation — but afterwards there is ulceration on the anterior part of the tumour communicating with the lachrymal sac — this should be opened — and a small probe being passed into the canal from above gives relief — after this a bougie should be introduced and a piece of sup ash placed on the tumour — sometimes the duct is impervious and here an artificial opening must be made by piercing thro' the Os Unguis — a piece of bougie is to be passed down thro this opening and bent down at its upper end on the cheek — this disease is often accompanied with Caries — in this case the carious bone must be extracted — I next proceed to the operation — To perforate the Unguis and take a piece out I use a punch and for a resistance I have a horn made to pass up the nose and place it against

† cut nearly in a line with the edge of the orbit

The nature of the ulcer on the ~~outside~~ inner ~~edge~~ canthus of the eye is misunderstood often — it can only be cured by clearing the ductus ad nasum —

† this was first used by Jno Hunter —

the Os. Unguis — The Lachrymal sac is always distended w. this disease and forms a tumour at the internal canthus — it must be opened — you find the course of the duct by cutting in a straight course downwards from a little below the tendon of the orbicularis muscle — then you can pass the probe which goes generally about 1½ inch — after this the duct may be dilated by a bougie or by an instrument invented by Mr Ware — it is a piece of silver wire with a head on it and bent at the top so as to lay flat on the cheek — this may be covered by a piece of black silk — this instrument is called a stilet — the tears can pass down the side of the stilet — this may be worn 6 a 8 weeks — after this the wound is healed by Emp. adhesion something of that kind — patients do not complain of wearing this stilet — sometime the duct is impervious and here the Unguis must be perforated as I told you — to do this the Lachrymal sac must be exposed — the horn passed up behind the os unguis — then the punch is to be used to cut out the piece of bone — often making the perforation the external wound may be healed directly —

The cataract is of two kinds
grey and white – it is also ~~thus~~
very fluid and sometimes very firm –

Cataract – By this is meant, an opacity of the crystalline lens or its capsule – this disease is evident behind the pupil, filling often that cavity – before it is quite formed, must it be born before the eyes – these exists sometimes long before an examination will discern them – Cataracts are often brought on without any exciting cause – sometimes mechanical accident occasion this disease – I knew it formed by a needle punctured thro' the Cornea – this was only to be cured by Mercury – ~~many~~ many medecines have been used to remove cataract – Mercury is the head one – bleeding, blistering &c has been used – sometimes ~~often~~ opacity form, it is dispersed if left alone to Nature – as medecines cannot remedy this disease we are under the necessity of resorting to an operation – there are two modes, 1st Couching – this consists in puncturing the sclerotica, the 1/4 part of a line beyond the cornea and the needle passed horizontally to the cataract is made to depress the lens to the bottom of the eye –

Extraction consists in making an opening into the cornea and then puncturing the capsule of the lens and the lens may be taken out & if the capsule be opake, it may be removed – both operations are practised, but the latter is most common – the reasons why the latter is best are 1st It gives the patient less pain – Couching has occasioned the total loss of sight – patients have declared that extraction

gives the least pain — 2 — The Cataract being once taken out can never return, but in couching it is pushed only to one side and may afterwards rise — it is said that the capsule is absorbed — it is in some cases but certainly not always — the cataract will sometimes float about in the eye even after being broken off — 3 When the cataract is fluid it can be extracted, but it cannot be depressed — 4 When the capsule as well as the lens is opaque, you cannot depress the capsule but you can extract it thro' the orifice made in the cornea — if the capsule be tough, it may be depressed — 5 When adhesions exist between the iris and capsule the adhesion may be separated by the remedy of Extraction, but cannot be done by Couching — Sometimes the patient will be affected after the operation of Couching ~~after~~ — The inconveniences of Extraction are the effects of a bad operation — ~~the~~ first is opacity from cicatrix — if a good knife be used and the operation fairly performed, this will not follow — this is ~~therefore~~ of no importance 2 In consequence of forcing the cataract thro' the pupil the Iris is injured; where the Cataract is very large this actually may take place — it is said that in making a section of the cornea, the iris will be cut, but this will not happen to a skilful practitioner — it always happens in consequence of pressure on the eye being too great — but the Iris is easily disengaged from the edge of the knife by rubbing it gently ~~to~~ with a finger — The next objection is that by opening the eye, the vitreous humour will be forced out —

I acknowledge the vitreous Humour has escaped, but it was the fault of awkwardness -

For these reasons then I have preferred Extraction - I have performed the operation of Couching - the first case was a child of 10 years old - I depressed the Cataract very easily and vision was happily restored - but in another case the patient could not bear the needle without much pain - I depressed the cataract easily - but in a few days, the patient complained of violent pain in the head - she appeared to have gutta serena - I have seen violent inflammation succeed couching and even a total destruction of sight - In the extraction of Cataracts I believe I have succeeded in 5 cases out of 6 - There is a circumstance attending Couching which I will relate - when the cavity of the eye is opened, the action of the serous vessels is increased - there is always a flow of humour two or 3 days after the operation - the accumulation of aqueous humour must be great beneath the Sclerotic coat & this occasions paralysis in many cases and this only I could account for Gutta Serena after operating for depression - In attempting the operation of extraction it is desirable to know that there is a chance of success - the eyelids should be free from inflammation - the eye should be natural except as respects the Cataract - women often have violent pains in the head, with Cataract - in these cases I direct depletion & then operate, but not before -

the best test by which we can decide as to the propriety of operating, is the ability of the patient to distinguish between light and darkness, if he cannot do this, the operation will do no good —

Dr Physick has improved the Speculum by fixing a ring near the lower end to admit the little finger —

it is desirable that the pupil should have its natural dilatation and contraction - sometimes the pupil is fixed, the optic nerve insensible & gutta serena exists - here the operation should not be done - But Gutta serena does not exist in all cases where the pupil is immoveable - immoveability of the pupil sometimes depends on adhesion of the iris to the anterior of the crystalline lens - the contraction & dilatation of the pupil is not always a sign of sensibility of the Retina - of this I am certain from experience - before extracting the cataract the patient should live low, be bled if the eye lids are inflamed; on the day preceding the operation the bowels should be emptied completely - to operate, it is necessary to apply a bandage round the head with a compress over the sound eye secured and one pinned up for to cover the other eye after the operation - on account of the motions of the ball of the eye, Specula have been invented to fix it completely, by inserting it between the eye-lids - such an instrument is altogether useless in Extraction - the great inconvenience of this instrument is that one of the hands of the Surgeon must be employed to hold it - the eye can be held still without a speculum -
the next instrument is a knife for opening the Cornea - the knife of Baron Wenzel is the best - its blade is 1½ inch long & 1/8 inch wide, terminating in sharp point - one edge is very sharp and the point of the other edge is also sharp - the knife should be thicker as it recedes from the point, so as to act like a wedge in the incision -

× in a direction parallel to the Iris - the opening should be made by one Incision -

The knife should be very sharp — the next instrument wanting is a curved needle with a very sharp point - this is for the purpose of puncturing the capsule - on the other end of this instrument is a very small scoop — if the capsule must be extracted a nice, small pair of forceps is necessary to be at hand — the forceps should touch accurately at their end — Besides these a very small hook is necessary to raise the cataract when it falls down as is sometimes the case —

Jany 26 1810

In operating for Cataract the patient should be placed in an oblique situation with respect to the light for different reasons - the surgeon should have a full view of the his & should be seated higher than the patient - an assistant must stand behind the patient to hold up the upper lid - the lid should be first folded up & so held that way the patient cannot pull it down — then the surgeon places two of his fingers on the lower lid - so that the eye is kept open — when the eye is still, the knife with point should be applied to the cornea 1/2 of an inch from Tunica Sclerotica - then carry it across the cornea ; after cutting the cornea, the knife is to be pushed ~~horizontally~~ to the ~~incision of the cornea~~ — then a fine needle is to be introduced and passed thro the pupil to the crystalline lens which must be lacerated as much as possible with regard to prudence — then with moderate pressure you can force the lens out of the incision of the cornea —

† the knife must be retracted just before it pierces the opposite side of the cornea by which the aqueous humor escapes and the iris falls folds - the foto is easily divided

but the lens is little removed by a fine needle with a hooked end ~~and~~ passed in and through the lens then it is easily extracted thro' the incision of the Cornea — if there be any portion remaining rub gently the iris; this bring the fragment forward which may be removed with the hook —

When the capsule is opake it is to be removed by a small pair of Forceps — sometimes the capsule is tender and comes away little by little; in this case patience is necessary to use the forceps often —

After the operation the eye is to be closed, a small compress is to be placed over it and secured by the bandage formerly mentioned — the bandage must not be applied too tight — the patient should be placed in bed on his back and to prevent him from raising his hand to his eyes I tie them with tape to the bedstead — for patients in waking are apt to rub their eyes —

The ~~diameter~~ blade of your knife for cutting the cornea should be more than half the diameter of the cornea for you should make the incision at one stroke —

<u>Artificial pupil</u> — this should be made in centre of the Iris — the bandages above mentioned are to be applied — the cornea knife is to be passed as before till it reaches the centre of the Iris, when the point is to be depressed — in this depression a kind of semi-circular flap remains, which may be removed by a fine pair of scissors introduced — or it may be removed by a kind of forceps with sharp points, which acts like scissors —

It is best to puncture the Sclerotica with a sharp pointed Scalpel before passing the needle, for some force is otherwise necessary in introducing the latter instrument —

In other cases, the iris has seemed to be tense but on making the last mentioned operation the iris contracted and a beautiful pupil was formed at one operation – in other cases where a part of the cornea over the pupil is opake, you can remove a part of the Iris behind a clear part of the cornea –

After having performed this operation successfully, inflammation & suppuration may follow, & as there are risks, the patient should be informed of the fact –

On Couching for Cataract I have yet to say something – Mr Hey has contrived a needle quite round and straight, very small at the upper end and growing gradually smaller till it terminates in a very fine point – another needle is in use which is curved at the point. this I have used – to operate, the eye is mostly fixed with a speculum – the needle is introduced at a very small distance outside of the cornea, thro' the Sclerotica – at a distance of about ¼ an inch – then the needle is to be turned and worked about in the lens – but I have told you my reasons for preferring extraction –

For Scarification – I now show you a ~~needle~~ small knife – it is used to divide the vessels of the eye – it must be very sharp –

+ which ought naturally to occupy the cavity of the abdomen —

Part of the intestinal canal & omentum are the most common contents of hernia - but there are instances of rupture of the stomach, uterus, liver, spleen and bladder

When the tumour is confined to the groin the hernia is said to be incomplete and is termed Bubonocele

When it reaches the to the bottom of the scrotum it is said to be complete and receives the name of Oscheocele

When a portion of intestine alone form the tumour it is Enterocele or Intestinal Hernia —

When a piece of omentum only is protruded it is Epiplocele or Omental Hernia

When both intestine and omentum are down it is called Entero-epiplocele or Compound rupture —

Hernia are termed Inguinal, Scrotal, Femoral, Umbilical, and Ventral.

Hernia - by this term is meant a protrusion of some part out of its right place - it takes place at the umbilicus, abdominal ring &c - When the tumor appears in the groin the intestine pass down by the abdominal ring along side of the Spermatic cord -

all the different viscera have been found protruded - There is a species of hernia termed Congenital Hernia - this is a passage of intestine down into the tunica vaginalis at birth, with the testis -

Inguinal Hernia - this begins with a tumor at the abdominal ring and passes down growing larger till it gets to the groin - it may be reduced generally by the patient when lying down - The intestine passes along side of the Spermatic cord - we know a hernia by the following symptoms - 1st By its passing from the groin downwards 2 By the tumor increasing on standing 4 By its growing less on lying down 5 By the bowels being in an irregular and costive state - It is of great importance to be acquainted with these symptoms - Hernia may be known from Hydrocele by the latter commencing low down in the scrotum & it is not enlarged by coughing - the parts are also of a diaphanous colour - a venereal bubo resembles Femoral Hernia, but the bubo cannot be lessened in size by pressure or increased by coughing - the sure Red testicle can also be discerned

from Hernia — for the swelled testicle is never altered by coughing & there is a flattened appearance at the sides of the scrotum —

Jany 29th 1810 Monday

The causes of Hernia are various —
General debility any cause induced often produces Hernia
Violent straining of the abdomen occasions it — costiveness, tight cloths, jumping &c occasion it — as long as a portion of intestine is in the hernial sac so long will it be subject to risk of strangulation —
Patients can often reduce the hernia themselves —
As long as the bowel remains down the patient is not safe for stricture may take place — some have thought Mental Hernia not dangerous but this is incorrect — an instrument called Truss has been invented for the purpose of retaining the bowel up in the abdomen after reduction is effected — before the application of this instrument the patient should lay down, the contents of the Hernial tumour forced up entirely which may be ascertained by feeling the parts — then the pad of the Truss is to be put over the orifice of the Hernia and the Truss fastened on — in general this instrument is applied down too low and the Spermatic cord is often compressed and the pain thereby increased — another inconvenience is that by this way the hole of the Hernial sac is not closed — the Truss should be fixed so that the pad press on the orifice thro' which the Bowel protruded — this is the only bandage in use —

After Truss is applied the patient should not use much exercise — else the hernia will again form — the bowels should be kept open — straining should be avoided — the truss should be worn night and day — children should wear it for some time but adults should always wear it — In some cases, the tumor being large the Hernia is not readily reduced — here the patient should lay down on his bed — be bled, purged &c and after 10 days the Hernia may be reduced & then the Truss should be applied. There are some cases in which the Hernia cannot be reduced on account of the alteration in the shape & form of the bowels, or account of adhesion being formed — here the Hernia should be supported by a Suspensory band — sometimes the bowels perform their function well but not so always

Strangulated Hernia — here the tumor becomes tense nausea & vomiting comes on and fæces are thrown up — sometimes the stricture is so great that the blood sent to the incarcerated Hernia stagnates — sometimes no blood is sent to the bowel so strangulated and mortification ensues — the scrotum becomes dark, pulse full and the patient will soon die — when death takes place the tumor acquires a dark colour &c — on examining the contents of the sac after such symptoms it contains serum of a dark brown colour — sometimes the whole is gangrenous — "A stricture may be produced by the contraction of the abdominal muscles" —

Cooper

+ Immediately after strangulation faeces are discharged — Here from the parts below the stricture —

O prepuce should be moderate —

+ In acute Hernia where strangulation comes on suddenly, purgatives do harm — they may be useful where the disease is chronic

+ Make it into ℥i of Tobacco and 1 pint of warm water — inject one half of this at once —

Sometimes the strangulation begins above the abdominal ring — I have mostly found the stricture at the ring

The treatment of strangulated Hernia

The bowels are generally in a very costive state. the patient should be laid on his back and the abdominal muscles completely relaxed — pressure should be made on the tumour — if this succeed not bleed, use warm bath, glysters of tobacco juice & — bleeding should be used ad deliquium — if this fail the warm bath should be used and the taxis attempted — I always use mild purgatives as Senna — tart & Jalap — Purgative clysters are used but if they sicken prevent their use — While the intestine remains strangulated purgatives do no good — The Tobacco Glyster has been most useful — The infusion is used generally + you may inject every half hour if no vomiting is induced — When the sickness & fainting are produced by the Tobacco, the tumour becomes soft and the bowel passes up — if this fail, the cold application should be resorted to — ice is used — equal quantities of crude sal ammoniac & nitre, acetate of lead & cold & this may be applied — this often succeeds — Opiates are always useful by suspending for awhile the vomiting — an adult may take ℥ 1 gr. by the mouth and an injection of Laudanum containing ℥i Laudanum —

+ Patients have survived who have had their intestine in strangulated state 17 days & and the wristy are cold —

+ Scratch a hole in the tendinous fibres under which introduce a director and then cut away —

+ To divide the stricture cut directly upwards — for cutting inwards would wound the Epigastric artery and as this vessel sometimes runs outwards external to the Sac, to cutting upwards & outwards would do mischief

If there do not succeed an operation becomes necessary — the time when this should be done, is uncertain — many have died by delaying it — It is best always to have recourse to it after the above have been tried. Hernia has proved fatal in 8 hours — the operation may be performed tho' the pulse is weak and the countenance pale — small hernia are often more difficult of reduction than large ones and recent hernia are sometimes more difficult of reduction than old cases — When the stricture is so great as to prevent the flow of blood the body becomes cold and mortification soon succeeds —

The operation consists in dividing the parts covering the bowel — an incision should be made from above the abdominal ring down to the bottom of the tumor down to the tendinous fascia, some of the fibres of the cremaster muscle are now seen which must carefully be cut through — then a hole must be cut in the sac — in the sac a quantity of fluid is often found — but sometimes no fluid is found — by passing the finger up to the ring you feel the place of stricture — this should be divided with care — after having dilated the stricture the bowels are to be passed up — this is the method usually employed —

* A fellow might as well have hernia as be compelled to read such an apology for writing as this is

† This practice was recommended by Dr Mann it saved the trouble of opening the sac in some cases —

January 31 1810

Before operating for Hernia the Pubes should be shaved and patient placed on a table — scalpel, director tenaculum, sponges, watter & should be ready — an incision should be made from above the pubes down to the scrotum — the tumour commences just about the os pubis — begin your incision two inches above the pubis — the object of this incision is to lay bare the tendon of the external oblique muscle — the abdominal ring &c — having exposed the external oblique muscle you are to scratch a hole above the ring and in that to pass a director down under the ~~[illegible]~~ tendinous fibres then the ~~sac may be opened by cutting~~ knife may be taken along the groove of the director — when gangrene or mortification exists the sac should be opened — when the ring is cut thro' if that be the cause of stricture, the taxis may be performed — if we cannot succeed by this operation the sac must be opened — here the bowels are often found adhering to each other or to the sac — the adhesion must be separated and then the bowels can be forced up — but if a part of the omentum be enlarged cut it off and tie the remainder so as to secure the blood vessels — the difficulty of separating adhesions is often great — and in many cases when returned will not perform their functions — where the adhesion is very great I believe it would be best

Where the intestine is mortified in one or two spots it is best to leave ~~that~~ part of the canal at the ring — the dead parts will slough and the opening be gradually closed — inflammation takes place in a few hours — when there is a hole in the intestine occasioned by mortification — then a pen stitch may be used and the intestine placed opposite ~~the~~ ring the stitch will pass per anum or the orifice — When a whole cylinder of intestine is dead some have advised to cut away the mortified parts and use suture — but it is best to lay the mortified bowel at the ring and Nature will speedily remove it —

+ Writers have recommended stitches in this case to secure the gut from slipping into the belly, but there is no occasion for this practice — the ~~bowel should be kept at the ring~~ mortified part should be merely laid out of the ring — leave the rest to Nature

merely to divide the stricture and leave the Hernia in this way for if we ~~pa~~ use great efforts to remove the adhesion to the sac, and get the bowels up, they will not perhaps perform their function as well as when in the sac — the sac should always be opened when we suspect mortification this is known by the change of colour of the tumor from red to a dark colour — it grows turgid — and the pain begins to grow less — sometime a part of the coverture sloughs and an artificial anus forms — When the sac is opened examine the bowels — they are often inflamed — but if the stricture has continued long the intestine will be of a dark brown — after seeing this if a pulse you think circulation is going on, return it into the abdomen — if the part be mortified its texture is destroyed and it has an offensive smell — this should never be returned — some writers say it may be returned and will do no harm — perhaps it is best to pass all the bowels in the ring except the mortified part which should be ~~left~~ left out hanging ~~by the mesentery~~ This is the practice I have used — the mortified part will slough off and the intestine will retract and the aperture be gradually healed — Abernethy recommends 4 stitches to be made thro' the mortified portion & ring —

I had a case of Ing. Hernia in which after opening the sac no gut was found and the finger passed up cavity not find an opening dissection shewed shewed the neck of the sac filled close with Gleet and the sac drawn up considerably into the abdomen —

I had a case in which the intestine mortified and both ends opened externally — I made a lateral communication between the sides of the intestine giving thereby a passage for the fæces the external opening gradually closed up —

Feby 2d 1840

After the intestine is attended to the omentum must be reduced if in a sound state — if mortified it should be cut off — arteries being cut must be secured by ligatures which must be laid outside of the wound — cases are met with where it is uncertain that the omentum is alive or dead — if dead and returned to the abdomen it is fatal — in the dead state the blood is found coagulated and by cutting the part will not bleed — if alive it will discharge blood on being cut — this is very important for a piece of omentum mortified, if put into the abdomen will kill the patient most certainly — after an operation for incarcerated rupture the best means must be used for healing the part — stiches should be used not strip adh. — patient should not strain nor use much exercise — if signs of inflammation come on bleed, purge, blister, give low diet — when the wound heals, apply a truss —

Femoral Hernia — here the tumor sits on the upper and fore part of the thigh — it is most common in females; seldom occurs in men — whenever patients labour under symptoms of strangulated Hernia, open the tumor, let the Hernia be of what kind it may — it is most safe to make the opening and if ~~the~~ ~~the~~ tumor should be

The intestines are ~~so~~ situated at the Hernia interior to the great crural vessels —

+ the tumor never lies under the Fascia lata

The stricture is mostly produced by the reflected part of the tendon of the ~~external~~ oblique muscle which is attached to the ~~os pu~~ symphysis pubis — this reflected tendon called the femoral ligament or crural arch is to be divided fibre after fibre in a cautious way for fear of wounding the Epigastric artery and the obturator artery which sometimes take a winding course — The spermatic cord may be avoided readily by dissecting it a little from its attachment and then passing a blunt probe under it to elevate it a little.

Umb. Hern. seen at birth, in infancy and also at adult life —

+ The ligature is to be applied so as not to give pain — it is increased in tightness daily until it separates — the ligature is to be kept —

only an enlarged gland, this may be extirpated. in reducing femoral hernia, push the tumor downwards from the Poupart's ligament, then backwards then upwards — in the femoral rupture, the covering parts are skin and cellular membrane and then a terminous membrane, the last of which being opened, you come in contact with the Sac — in femoral rupture the sac contains less water than in Bubonocele and the parts are also thinner — the ring is to be cut with all possible care, in order to remove the stricture — the incision should be made towards the os. pubis — but in females you may cut upwards and inwards for there is no fear of hurting the spermatic cord — the incision need not be very large

Umbilical Hernia — here the bowel protrudes at the navel — this mostly occurs in infants and it often closes up by a natural process —
The mode of treating this Hernia is to put a pad over the orifice and compressing the parts — it has been advised to push in the bowel and then ~~push~~ pinch the parts together and tie them with a ligature — this is said by Desault to succeed in all cases — for a few days the parts will turnefy, but this soon ceases — Desault directs a ligature now to be passed around the bottom of the parts so tied and the tumor in a short time sloughs — this is a safe operation —

Deffaults operation fails in patients, 9 years ob —

Compression is also used —
+ the integuments are very thin — cut thro' the sac, within an inch of the opening in the abdomen
after reducing the intestine tie a string round the neck of the sac to close the canal completely — do this by passing a needle in the adipose matter under the skin, round the neck of the sac and then tie —

To prevent the protrusion of the bowels at the navel a truss has been lately invented which is to be applied after the parts have been placed in their proper position - this truss has a pad in the front of it — if all these remedies fail, an operation must be performed — caution is necessary in dividing the parts, otherwise the intestine may be wounded — after the incision is made and the stricture exposed, pass your finger in it and divide it - - I would cut down to the fascia of the Recti muscle, which division expose the tendon forming the ring; the fibres of this ring are to be cut and the bowel may be returned with ease - this mode has been tried in this city —

February 5th 1810

It sometimes happens that in one hernial sac there exist 4 or 5 other sacs - such a case happened in Dr Dorsey's practice at the Philad Alms House - In some cases of old Hernia the sac is very thick - sometimes the sac is absorbed and the hernia is covered only by the skin — The Epigastric artery sometimes lies on the inside of the hernial sac - but it lays sometimes outside which shows the necessity of caution in making incisions — hernia of the Bladder have no sacs — sometimes umbilical Hernia have no sacs — the sac sometimes is the seat of stricture — Hernia often vary with respect to the contents of the sac — the omentum and Ileum are most often the contents of hernial sacs —

+ In Schirrus Testicle you feel the rough & uneven state of the testicle –

Cases are related in which part of the stomach has been found in a sac — Mr Pott has seen a case in which the bowels existed in a Hernial sac — Hernia of the Kidneys have existed — more than one Hernia will exist in the same person — this disease is very complicated —

Hydrocele — this is a collection of water in the scrotum — there is one kind in which the water is situated in the cellular substance — sometimes the water exists in a cyst —

The anasarcous Hydrocele is a symptom of Dropsy — the skin is nearly of a natural colour — the skin feels doughy —

Sometimes there is a collection of water in the tunica vaginalis — here the tumor increases gradually — this species commences at the bottom of the testicle and is mostly one one side first — at first it is generally compressible — it is important to distinguish this disease — it may be distinguished from Hernia by the tumor beginning at the bottom and rising upward — the reverse in Hernia — the tumor of Hydrocele cannot be done away — but the Hernia on lying down can be made to disappear — in Hydrocele you can feel the spermatic cord, not so in Hernia — Hydrocele may be taken for the testicle +

Another species of Hydrocele is where the water is collected in a cyst in spermatic cord — the skin is often diaphanous —

+ there is often a rupture of a vessel in the Tunica vaginalis occasioning a purple color ~~but~~ giving apprehension of mortification the blood is soon absorbed —

the swelling by pressure can be removed from the scrotum up towards the abdomen — pressure on the side makes no alteration — The use of a suspensory bandage sometimes prevent the necessity of an operation — but sometimes the surgeon is called in to discharge the water — Setons and scarifications should be avoided — it is best to make a number of punctures with the lancet — sometimes the anasarcous Hydrocele ruptures by accident — Hydrocele of the Tunica vaginalis has been treated with medecines — I have directed cold water to be poured on the tumor — we are called often to evacuate the content of the tumor — this is done by a trocar — I puncture with a lancet — simple as is this operation, some surgeons have had difficulty in performing it — it is necessary to find the situation of the testicle before puncturing the parts — The old practice of opening the tumor was by an incision — then the tunica vaginalis was entirely removed — some surgeons used Caustic over the tumor — this was kept on till the integuments were burnt through — another mode was by the introduction of a tent — this was kept in until suppuration came on — Mr Pott advocated the cure of Hydrocele by the introduction of setons — this method has succeeded in some cases — The next method of treating hydrocele is by strong stimulating injections to excite inflammation — Wine is used for injection diluted with ⅓ water — of these methods, that of Incision is certainly the best though the most severe & painful

+ I use a lancet ~~but~~ not the trocar to puncture the scrotum —

for here you have an opportunity of seeing the appearance of the parts – it happens however that when lint is put between the testicle and tunica vaginalis some threads are apt to remain & create suppuration after the operation has been done for some time – the other methods mentioned have succeeded & they have failed –

The inflammation attending the injection of wine is very mild and the pain of the operation is not great – the operation may therefore be often performed –

To perform this operation you must have a trocar – and a bladder with a stopcock in which there is some port wine diluted with ⅓ water – you then plunge the trocar in and then draw out the stilet – & always hold fast the integuments round the trocar – having evacuated the water – the pipe of the bladder is to be fixed into the ~~pipe~~ canula of the trocar and the fluid forced in – the bladder is taken away and after the fluid has been in awhile (5 minutes) let it flow out again and cover the parts with emplasm adh – support the parts with a bandage

The method I would prefer is by incision –

Mr Hunter cured this disease by making an incision into the tunica vaginalis and stuffing the cavity with dough – ~~in 3 or 4~~ lay a piece of lint over the cut surface in 3 or 4 days inflammation & suppuration took place and the dough was discharged with the pus – the discharge was in proportion to the contraction of the cavity of the Tunica vaginalis.

there is an itching at
the glans penis —

February 7th 1840

The matter of Stone exist in the Urine and Stone are found in many part of the body — Urine of the most healthy persons will by long standing deposit calculous matter — by sawing a stone in half we find it disposed in layers of different thickness and of different colours — Stones are formed in the ureters, Prostate gland &c they give great pain — I believe the stone exists in most cases, originally in the kidneys, and is washed by the urine into the bladder but stone is sometimes formed in the Bladder — The symptoms of stone are, heavy obtuse pain in the loins - coffee coloured, bloody urine — there is sometimes violent pain, spasms rigors &c — vomiting is induced by the exertions of Nature to get rid of this incumbrence — sometimes fever runs very high — when the stone is in the Urethra, there are violent retchings - here warm bath, opiates, glysters &c are very useful — we may suspect a stone in the ureter when there is great pain along the course of this tube — patients should use barley water — if the stone be not soon discharged from the ureter it will enlarge, become very painful and occasion a suppression of urine — sometime, the stone is carried down with the urine — the urine evacuated while the stone is in the urethra, is very fetid, and is sometime mixed with blood — This is sometime attended with Tenesmus and Prolapsus Ani — The digestion is interrupted patient grow weak and if the stone be not extracted, the patient will soon die — Inflammation and Ulceration of the neck of the bladder will often shew symptoms of stone — I have seen such cases — Hemorrhoidal tumors shew symptoms of stone in the bladder in many cases — Stone has existed in the bladder a long time without any signs of it — When small pieces of stone are discharged from the Urethra, we may suspect

the existence of stone — The most certain mode of ascertaining the existence of stone in the bladder is by performing the operation called <u>Sounding</u> — this is by passing an instrument bent like the urethra and introducing it into the urethra — the sounding instrument striking against the stone will easily discover it existence by the noise which will be evident — the sound should be previously warmed and dipt in oil — the patient should lay down and the sound be passed in with the concave side next the abdomen — it will pass easily in most cases but it sometime passes with great difficulty at the membranous part of the urethra — here we succeed by varying the manner of introducing the sound — turn the convex side next to the abdomen and it will then mostly pass — but you can mostly succeed by introducing the finger into the anus and feeling the course of the sound — these methods should all be tried — I have found it easier to pass the sound when the patient stands up — the same rules are necessary in introducing the Catheter — sometime the stone seems to have formed a pouch at the posterior part of the bladder and the sound passes over it — in this case pass the finger into the rectum as before directed & elevate the pelvis as high as possible —

When a stone is known to exist in the bladder an operation must be performed — no medicine can do more than palliate the disease —

Lime water affords relief — matter are injected to the bladder to give relief, but they are not of importance — In a fit of the stone, warm bath, opiates and demulcents are best — small portions of stone pass into the urethra and occasion suppression of urine — these pieces should be extracted as soon as possible — The instrument I use for this purpose is a Silver

of different sizes & shapes forceps
a pair of forceps with a point to hold
a needle so as to resemble common tenac
ulum for taking up the pudic artery —

+ Some staffs are grooved
behind others on the side — the
former are mostly used —
+ always introduce the staff first —
& holding them ~~and~~ in his left & ~~&~~
covering the front of the patient with
his hand —

probe flattened at one end and bent up in the form of a hook — it must be oiled and passed into the urethra and extract the stone with ease — I used this instrument with success last fall — but when the stone has formed a sac, it can be extracted only by an external incision — the external incision should be quite large so that the urine will escape externally and not pass into the cellular membrane — if the latter take place, mortification ensues —

The <u>Operation of Lithotomy</u> — Before proceeding to this operation, the bowels should be well opened and low diet attended to — the day before the operation, give Castor oil — the perineum should be shaved of its hair entirely — the patient should be laid on ~~the~~ a table about 22 inches wide — the table should be covered with blankets and a pillow be placed on it — before the operation, the lower bowels should be cleaned out by injection — and an hour previous to the operation give a dose of Laudanum — warm water, basins, towels, sweet oil should be ready — the instruments necessary are a grooved staff — a fillet should be ready to use are the hands and feet — a common scalpel and sharp pointed Bistoury — a Gorget — needles, ligatures & Tenaculum —

<u>Operation</u> — Having introduced the staff, the hands and feet of the patient should be tied together — the patient should be requested to ~~have his hands~~ hold his leg with his hands — assistant should press down the knees — the surgeon should be seated before the patient — the staff should be bent over the right groin — an incision is to be made with the scalpel beginning below the scrotum and carried down an inch below the anus, backwards — next divide the transversales perinei muscles and you thus expose

+ the lithotomy is much the best instrument —

+ in doing this care must be observed to depress the handle of the gorget, else it will slip from the staff —

Some surgeons divide the urethra with a scalpel — but I think this not so safe as the gorget — the consequences result from its use —

+ take up the pudic artery with the small forceps the needle as before mentioned —

the prostate gland and membranous part of the Urethra and you can easily feel the groove of the staff. You now cut the urethra and Prostrate gland with the scalpel, but I use for this purpose the sharp pointed Bistoury — by using the latter I have saved much time & by one stroke I lay bare the groove of the staff — the Gorget is next to be laid in the groove of the staff — after raising the staff at right angles to the body. Put with the Gorget into the Bladder — then I withdraw the Gorget and leave the staff in the Urethra — the gorget must be extracted with great caution — then introduce the finger into the bladder through the wound. When I find the bladder is cut sufficiently I withdraw the staff — then I oil the Forceps and introduce them into the Bladder — Having grasped the Stone I introduce my finger to see whether I have the stone by the smallest diameter — I then introduce another instrument which act as a third blade to the forceps and with these I extract the stone — after extracting the ~~forceps~~ stone, pass the finger to see if there be another stone and if so extract it — sometimes the stone is very soft and it breaks at the first grasp of the forceps — to extract these fragments you must have a large syringe and inject warm water or what is better, Barley water after the stone is extracted, attend to the Hemorhage — the patient is to be untied — the ~~bone~~ parts must be brought into contact and the patient put to bed with a sheet folded several times under him — so that when ~~that~~ under him gets wet, it may be drawn out & part of the roll that is dry will be under him —

It is called a Complete Fistula when there is an external opening as well as an opening into the Rectum — Occult when there is no external opening but the opening exists in the Rectum — Incomplete when only an external opening exists without a communication with the Rectum —

Fistula in ano may occur & does occur without acute pain — there is merely a hard tumor near the Anus — but this if not relieved will soon end in Suppuration and then it must be opened & treated accordingly — the best way therefore is to use purges, low diet & on finding hardness in the part whether there be pain or no —

Strangury is produced by the tumor pressing against the Bladder —

July 9th 1860

When the stone is too large to be extracted whole it must be broken by a pair of forceps of a particular construction —

Fistula in ano — This disease is the consequence of inflammation in the cellular membrane near the anus & rectum — sometimes there is a troublesome tenesmus & bearing down — the inflammation terminates in suppuration and separates the rectum from the buttocks — after the abscess is evacuated the disease is termed Fistula in Ano — When the matter is discharged thro' a small opening it is called imperfect — when there is no external opening it is called occult — It is always necessary to make an examination by passing the finger oiled into the rectum and a probe into the Fistula — if the latter be perfect, the probe will be felt by the finger in the Rectum and vice versa — in some cases the abscess is very large — sometimes a considerable part of the rectum is denuded — sometimes the disease is complicated with caries of the vertebræ — the causes of this disease are various — an early examination of patient should always be made — by this we prevent suppuration and the formation of a perfect Fistula — whenever the inflammatory ~~symptom~~ tumor is discovered, blood is to be taken away — give purges, low diet — when strangury comes on, use warm bath, opiates and if these do not succeed, draw off the water with a catheter — These means when timely used are generally effectual in removing the inflammation but unfortunately we are not often called in, until pus is formed and is escaping at different parts —

the reason why this is so long getting cured is ~~that~~ the patient by walking ~~rubbed~~ rubs the edges of the sore against each other and it becomes callous — and the tumour though once opened is suffered to heal too soon —

Where the fistula is so seated ~~that~~ dividing it would give occasion to the patient to suffer very much a Seton often I apply a string ~~so~~ in order to cut through gradually by the means — the string often awhile effects what the knife would do in less time —

+ There are several contrivances to obviate any injury into the sharp Bistory — for this purpose bistouries are constructed with guards to them —

Where the fistula runs very high up, a seton of Cadaw wire is to be introduced by means of a canula ~~&~~ into the fistula & brought out of the rectum with a forceps or an iron instrument resembling forceps — the seton divides the part gradually between the Rectum & fistula and flesh forms round above the seton — Mr Pott says this is not necessary — but I found always use it where I could feel a large blood vessel pulsating in the Rectum — ~~& I contrive it when the fistula communicated in Bladder~~

we should always open the abscesses—
If Nature be unequal to the cure, we must resort to an operation— when the Fistula is incomplete and the external opening small, pus collects and distends the cavity greatly — when the fistula is complete fæces are discharged into it at every stool — When the matter and abscess proceed into the rectum, the latter partakes of the disease — sometime, a large cavity filled with pus is found on one side of the rectum without any external opening — Sometimes a part of the Sphincter ani is completely removed from the ~~the~~ anus by ulceration; this being the case, some blood is mostly discharged at every stool — The general health of the patient influences the state of the sore — The operation consists in dividing the Rectum up as high as the Fistula runs — this allows a free opening to the sore and a discharge of the matter — the Sphincter ani being cut the anus will not now be drawn up at the time of stools — I refer you to Potts works —
When the fistula is complete, the operation ~~consists~~ is easily done with a blunt pointed Bistoury — + I lay on the blade of the bistoury a piece of linen covered with wax heated, so as to prevent the edge of the instrument from doing harm — the Bistoury is passed into the Fistula and the oiled finger into the Rectum and when the point of the Bistoury can be felt by the finger, the linen is to be pulled out and the part are to be divided by the Bistoury — after dividing the part, lint is to be placed between the edges of the sore to prevent immediate healing — the cavity grows less daily and at length heals —

In all aneurisms (says Scarpa) the artery is ruptured and the blood goes into the tendinous sheath round the vessel

February 12th 1810

Aneurisms — By this is meant a morbid deviation from nature in any part of the arterial system — sometimes the aneurisms are confined to parts, and sometimes the whole arterial system is disposed to this disease — the tumor is formed by the force of the blood acting on a weak part of the artery — I have seen an aneurism in the ham occasioned by contusion of the popliteal artery — but contusions seldom occasion aneurisms — this disease often takes place without any obvious cause — the inside of an artery so diseased loses its fine polish, the artery becomes thinner, dilates and give rise to the formation of the tumor — tumor and pulsation always attend recent aneurisms — but in old ones the pulsation is not very evident — this is owing to the formation of coagula within — the skin retains its natural colour until it bursts — In recent aneurisms we are able by pressure to remove the blood from the aneurism, but it returns on taking away the pressure — When the dilation of an artery begins it goes on slowly — when the aneurism increases so largely as to press on the skin greatly it bursts and the patient dies of hemorrhage — they sometimes burst inwardly — On examining the artery we find the dilation to be on one side only — the thickness of the aneurismal sac is as great as that of the artery originally — the sac is formed chiefly of cellular texture and not from the artery only —

There are some cases where the sac may be opened before taking up the artery – as where the tumor is so very large as to make pressure on the parts respectively in the vicinity.

the coats of the artery are frequently absorbed — the thickness is diminished on that side of the artery farthest from the ~~arte~~ heart — inside of the artery are found coagulated blood — little relief is found from medecines — low diet, rest &c may retard its progress — when seated on the limbs, compression is recommended, but it seldom does much good — Aneurisms have appeared to get well spontaneously —

The most frequent situation of aneurism is in the ham — here it is called Popliteal Aneurism — there is a tumor sensible to the patient and a pulsation in it — soon the leg feels numb and there is some pain which increases and the leg swells — the older surgeons treated this disease with a tourniquet above the knee over the artery then an incision to be made over the sac and the orifices of the branches entering the sac were to be found and the parts dissected away and secured by ligature — sometimes a violent hemorrhage came on which would kill the patient if amputation were not performed — this is owing to the sac being improperly managed — In consequence of frequent failures in operating for aneurisms, amputation of the limb has been resorted to at once — the failure has been attributed to a diseased state of the artery independent of aneurism — Jno. Hunter cuts down to the artery in the middle of the thigh and ties it up — this operation generally succeeds — I have seen this done in Popliteal aneurisms — but it was where the tumor was very large —

0 open the abscess some else it will often burst into the cavity of the knee joint —

+ at its inner edge —

The tied ligature being applied you are to divide the artery between them — the ends of the vessel retract considerably — if you do not cut the vessel — its tied state may cause inflammation, suppuration, sloughing of the end of the vessel and fatal hemorrhage —

0 this is Abernethy's direction —

Aneurisms sometimes occur at the bend of the arm — they are produced generally in bleeding, by puncturing together with the basilic vein the brachial artery at the same time — the aneurism sometime forms between the artery and vein — separating them — the sac consisting of dense cellular membrane — sometimes the aneurism affects the arm above and below the orifice a considerable distance — treat it by cutting down to the blood vessels and sac — tying the artery and vein above and also below the sac and removing the part between the ligatures — In varicose aneurism there is a communication between the artery and vein by means a tube similar to the branch of an artery — the vein dilates — cure this by tying the tube as you would the branch of an artery —

When the femoral artery is tied the sac is generally absorbed - but sometime the ~~parts~~ sac suppurate, and I prefer opening the abscess below the sac - it is always ~~in~~ right to apply a tourniquet round the thigh high up - an incision about 4 inches long is to be made by which you expose the sartorius muscle; under this muscle you find the great vessel - you must expose the internal edge of the muscle in order to find the vessel - having exposed the vessel, cut thru the fascia on each side of the artery - then the vessel may be taken up by passing a curved needle under it, armed with a quantity of thread; by raising the thread if you stop the pulsation in the sac you may be sure of having secured the artery and you may tie it - two ligatures instead of one are directed by some to be used - I have adopted this method - the operation being completed, the edge of the wound are to be united with Emp. Adh. at the end of 3 or 4 week the ligature sloughs off and the wound gets well -

February 14 1846

Tracheotomy is an operation which is performed in cases of tumors forming so as to suspend respiration - sometimes instead of an operation a catheter is to be passed into the glottis - when there is a tumor in the mouth introduce the catheter by the nose - under such circumstances tracheotomy is often performed - there is no risk of hemorrhage in introducing a catheter into the windpipe, but there is a risk in Tracheotomy - the operation of opening the windpipe becomes requisite where foreign substances are in it and cannot be coughed up -

+ the incision to be between
the cartilages for answersely

Polypi in the trachea also render an operation necessary — when a substance falls into the wind pipe there follows violent coughing and the substance is not always coughed up — the matter remain there often for years — it is of importance to know whether the substance be in the trachea or the oesophagus — to fix the matter introduce a catheter into the trachea — the catheter should be large — when the catheter enters the larynx it occasions violent coughing and if a flame of candle be placed at the end of the catheter, it will be blown out — when introduced into the pharynx there is less irritation — if you inject a liquid into the oesophagus there will be no inconvenience but if you inject it into the trachea, there is violent retching and the matter is thrown off — the tube should be run & then taken out of the trachea & cleaned —

When the operation becomes necessary, there are two ways of doing it

Tracheotomy consists in dividing the trachea at one of the rings — it may be divided longitudinally if necessary — in performing the operation the patient must be seated and his head inclined — a bistoury and canula are necessary

The surgeon makes an incision an ~~inch~~ inch long from the cricoid to the thyroid cartilage — the canula is to be introduced and covered with Gauze — if it be necessary the cricoid cartilage may be cut entirely through — the wound may be closed and easily united when it has been made merely to take away foreign substances — foreign substances get into the oesophagus and occasion violent spasm — they must be extracted or forced into the stomach —

When the substance is fixed at the upper part of the oesophagus, the surgeon can extract them, by pressing down the roof of the mouth — emetics may be given to throw up some substances — fish bones, needles &c are thus extracted — In Coopers first lines of Surgery there is a good contrivance mentioned to extract such matters — it is sometimes absolutely impossible to extract matters in this way — the matters in the oesophagus sometimes occasion inflammation & suppuration, and even gangrene — needles that have been swallowed travel thro' the body and come out at other parts of the body — In attempts at suicide the trachea and oesophagus have been cut without injuring the carotid arteries — Schirrous & large tumors often prevent free respiration and deglutition — when the patient is unable to swallow give him nutritive glysters and introduce a tube into the stomach by which food may be conveyed — Mr Hunter proposed to plug an eel skin in the oesophagus thro' which he injected nutriment into the stomach — a large tube may be introduced & a syringe fitted to it, by which food may be injected freely — Desault used this mode —

Stricture of the Oesophagus — this being a muscular canal it is capable of contraction & dilatation — it is often affected with violent spasm — if it be not attended to there will be an obliteration of the canal — Mr Home has given accounts of this — In all these instances the pain commences with difficulty of swallowing & every act of deglutition gives great pain — Emaciation follows —

If the patient be not soon relieved he will actually starve to death – I have seen such cases – Mr Hume recommends to introduce bougies of waxed linen – beginning with small ones and afterwards using larger ones – there strictures are like those in the urethra – when the bougies fail, use lunar Caustic – apply the Caustic on the bougie and introduce it – repeat this operation as often as necessary – the bougie should be curved –

Polypi – these are fleshy substances arising from different part – the nostrils are the most common seat of it – they begin with small pale tumors, beginning at the os Spongiosum – watery eyes attend – sneezing is frequent – the tone of voice is much altered – the weather influences this disease – it is worse in wet weather – gradually augmenting in size the tumor at length obstructs the passage of air into the nostrils – it becomes visible anteriorly and at the fauces over the velum pendulum palati – the eyes are constantly effused with tears in consequence of the obstruction of the nasal duct – sometimes ulceration follows – the entrance of air into the nose being stopped, patient keep the mouth open – hearing is injured on account of the obstruction of the Eustachian tube – the appearance of the face is altered – headache comes on – bones become carious – the tumor often ulcerates – hemorrhage often comes on – the teeth come out of their sockets – in the last stage of disease, stupor, coma & convulsions come on and death follows – the cause of the disease is unknown –

In the commencement of the disease the tumors should be extracted directly — I refer you to Bell's Surgery —

— February 16th 1810

Schirrus and Cancer — Schirrus is a hard tumor possessing little sensibility — when this tumor is ulcerated it is called Cancer — sometimes Schirrus terminates without cancer — in the mammæ such tumors often occur — if they do not yield to low diet, evacuants & it is best to recommend their extirpation — schirri often arise without any obvious cause, but they sometimes arise from blows — schirri may last a long time before ulceration takes place — when a schirrus tumor is changing to cancer it becomes painful — its colour changes to purple — it is at length surrounded with varicose veins — the part becomes turgid — violent shooting pains attend this state of the disease — they shoot to various parts of the body — sometimes an obscure fluctuation can be felt and after awhile ulceration commences — a fœtid sanies flows out & the disease is called Open Cancer — this disease is often quick in its progress and fatal in its issue when schirri are known to exist they should be extirpated as soon as possible — the centre of the tumor at first is hard — resembles a nucleus and is very prominent — the circumference of the tumor is not confined; as the disease advances the structure of the tumor is less evident — when ulceration comes on the tumor is changed entirely —

Sometime the tumor is contained in a cyst — when tumors are extirpated you can know whether they were cancerous or schirrous we are not always able to know what tumors will or will not become schirrous — Mr Home speaks at large on this subject — I think in most cases it would be best at first to try bleeding, blisters, low diet, mercury &c and if all fail advise the ~~opera~~ extirpation — when tumors become painful even tho' we are not certain they have been schirrous, it will be best in many cases to remove them but to this rule ~~there~~ are exceptions — Medical men have never decided whether cancers were contagious — but many declare them to be very contagious — Cancerous sores are said to emit a fetid halitus capable of communicating the disease — cases of this kind are related — but probably these diseases were not cancerous — I ~~nothing~~ believe that nothing like contagion attends cancer — otherwise we should be always liable to cancerous affections — Cancer has been called an hereditary disease — Mr Home denies this principle in part — Cancers have been divided into sthenic & asthenic by a Professor — the first are cured by extirpation — the latter by time — Cancers occur at all period of life but especially in old age — When Cancers first in women, we are told that the catamenia are obstructed — Glandular parts are the most common seats of cancer — the Mammæ of females are often affected with them — sometime the whole mamma is swelled and becomes disagreeably heavy — sometime symptomatic fever attends — here depletion of all kinds are used and this often succeeds in curing —

Never attempt the operation unless you are sure you can remove all diseased parts but in the breast and axilla — If the gland only be diseased one incision is enough — dissect the gland out tying blood vessels as they are cut —

But often the mamma is to be extirpated and in this case the disease is always cured — sometimes there is chronic inflammation in the mamma — this is to be treated with bleeding &c.

Scrophula often occurs in the Mammae of females — where the skin only is affected, there is no danger of schirrus — where a great number of tumors appear, they are scrophulous and not schirrus — It is almost impossible to decide what tumors are schirrous & what scrophulous — the best way is to decide on extirpation if the appearances tend to prove the existence of schirrus —

Sometimes Hydatids exist in the Mamma — it is best to extirpate them

The Mamma may be enlarged from sympathy — these cases are not dangerous —

Two modes of extirpating tumors are used — viz Knife and Caustic — the former is much the best — we can cut what we please and limit our operation as we please — when the knife is used the following are encouraging symptoms — 1 Where there are few blood vessels — 2 Where the disease has resulted from accident &

Before the operation seat the patient in a good light — make an incision down the tumor — but if the skin be diseased make two incisions in the course of the fibres of the pectoral muscle — When in the armpit, before cutting out the tumor you should secure the vessels by ligature — When the tumor is removed close the wound by adhesive plaster so as to have union by the first intention if possible — the best local applications when cancer cannot be

knots like lumps of shot in the skin are unfavorable — when the tumor feels as though it extended to the bone muscle and ribs the operation must not be attempted —

removed are hemlock &c
The internal medecines are solanum, opium, arsenic &c
Arsenic has been the chief remedy among Cancer
Quacks — Cancers often exist in the neck and their
removal is very dangerous — such tumors must
sometimes be removed on account of impeding res-
-piration, deglutition &c —
Noli me tangere is a disease affecting the parotid
and sub-maxillary glands — the tumor remains long
indolent before it ulcerates — the actual cautery
and common caustic have cured — if it can be
extirpated the knife should be used directly —
There is a disagreeable foetor discharged from these
sores — Sometimes the Tongue is the seat of Cancer —
the lips are also affected with this disease — Calculi
are often found in Schirrus tumors — when on the
under lip it may be easily taken away —
The eyes have been extirpated for Cancer —
Cancer of the Rectum has occurred — opiate
Clysters or solid opium in the rectum does good —
The Tunica Vaginalis and Bladder are liable to
cancer — The Penis is sometimes the seat of this
disease — it commences in the prepuce — The
Glands in the groin are subject to Cancer —
Mr Hey has amputated the Penis when affected
with Cancer — the Uterus is often Cancerous — it
has been advised to remove the uterus but it should
not be done — Schirrus Testicle ends in Cancer
if not soon extirpated — when it becomes painful
on being handled, rough and uneven to the care
is Schirrus — if neglected it changes to Cancer and
death follows — a Scrophulous tumor of the Tes-
-ticle often exists — this is often attended with inflam-
-mation — suppuration sometimes follows — if the
disease spreads far, it should be extirpated —

† This mode of cutting round the tumor is what Surgeons call Martingent the ground

February 19th 1810

In Schirrus of the Breast the part should be very carefully examined before an operation - sometimes the disease extends to the axilla - and it will be of no advantage to extirpate the breast unless the tumors in the axilla be also removed - in removing tumors it is of importance to save skin enough to cover the wound - but sometimes it is necessary to remove all the skin surrounding the tumor - if any portion of the skin be ulcerated and adhering, such portion should be removed - besides taking out the tumor it is best to take a considerable part of the flesh in the vicinity; after the operation the sides of the wound must be connected by Emp. adh. previously securing the bloodvessels - it is best to make the incision in the lower part of the breast through the skin and adipose membrane - take up the vessels which are divided by this incision - then an incision is to be made at the upper part of the breast - this incision must be outside of all the diseased portions - now dissect off the adipose membrane - then divide the soft parts down to the Pectoral muscle and dissect off the indurated gland - if any part of the gland adhere to the muscle take it away - then dissect away the skin from the lymphatic gland - next the tumors in the axilla are to be cut out - as soon as you can pass your bugle in the axilla above the tumor you need dissect no further - you should not cut off the tumor as yet - a ligature must be tied round above the tumor to secure any

vessel that may be there — then the tumor may be cut away — then the skin may be brought together and retained by Emp. adh.

In Schirrus Testicle if the disease has not gone up the spermatic cord we may remove the tumor — an incision is to be made down the tumor and when the knife reaches the tumor it is best to cut down deep to be certain that the disease is schirrus — then detach the tumor by dissection — lay bare the spermatic cord — a ligature must be applied on the cord high up — for if a part of the schirrus be within the tumor, the disease will certainly continue — I have always drawn the cord at the first application as tight as completely to stop the circulation — this gives some pain — then the cord may be divided and the testicle removed — at ten or 12 days the ligature with the cord sloughs off — the parts are to be brought together and retained so

In Effusions of Water into the Abdomen we are often called to draw off the water — by placing one hand on one side of the belly and pressing it & put the other hand on the other side, a fluctuation is felt and we are sensible that water exists — before operating we should tell our patients that the belly may not contain water — likewise before we operate a young woman we should be certain that the swelling is not owing to pregnancy — the instruments for tapping are a Trocar and canula and another instrument like a lancet —

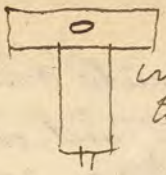
I always make a perforation first with a common lancet and then introduce a canula or what is as good a female catheter – There are two places in which tapping may be performed – half way between the ilium and the navel – and a little above the ilium – always on the left side to avoid the liver which is often indurated – in the first place of operation the epigastric artery has been cut – it is best to make the puncture half way between the pubis and navel – along the linea alba – let the patient always make water before the operation – it is best to lay the patient on a bed with his belly projecting over the bed side – then introduce the ~~trocar~~ canula as directed and with a sheet round the belly press the water out – after this put a piece of lint over the wound and it soon gets well –

In difficult breathing we are often called to operate on the trachea – make a longitudinal incision from the Pomum adami over the Cricoid cartilage – then wait awhile till the hemorrhage is stopped – then make a perforation through the membrane between the Thyroid and Cricoid cartilage – I believe the hole made thus would be large enough but it is sometimes necessary to introduce a canula or something of that kind – but I use another instrument which fits exactly and has a hole in the front which must be covered with gauze to prevent the entrance of insects –

There are 4 modes of removing Polypi — by ligature by the knife, by caustic and by forceps — the last is the best mode —

† a double canula is requisite —

† the wire may be removed after it has been on 36 hours —



instrument to be introduced into the trachea —

The Operation for Polypus Nasi — This is performed by Forceps generally — but some have operated by introducing a wire round the polypus & letting it lay there till the tumor came away — sometimes the polypus is so large that when it gets loose and falls down, it almost suffocates the patient — in such cases it will be best at first to secure the tumor by a ligature — sometimes a large polypus tumor extends to the fauces from the nose — here it is best to secure it by a piece of tape — the hemorrhage is seldom alarming from this operation — you may stop the bleeding by stuffing the nostrils with soft toe —

Schirrus Tonsil sometimes impairs the voice and hinders deglutition — as soon as the tumor becomes visible it should be extracted — this may be done by securing a wire round the neck of the tonsil thereby impeding circulation and destroying the life of the tumor — thus the tonsil will slough away in about 10 days or 2 weeks — sometimes after the wire has been on a few days the tumor is best removed by a pair of Tonsel scissors —

Sometimes foreign matter get into the Oesophagus and they are generally removable by an instrument called Probar consisting of a piece of sponge fastened to the end of a whale bone — sometimes the substance sticks in the oesophagus and is kept there by spasm — I have seen such cases — sometimes vomits will remove such substances —

Hemorrhoidal tumors are of acute and chronic form — they may exist within and outside of the rectum — in acute stage, antiphlogistic regimen must be used, horizontal posture, lenient purges, and the pain may be relieved by puncturing the tumor — an ointment of oak galls and lard, also different astringents are useful after inflammation is lessened — the tumors may be extracted by ligature — they should never be removed by incision — after the ligature has been applied 36 hours it may be removed for the tumor is now dead — considerable pain attends the application of the ligature — the tumor sloughs off in a few days — the tumor inside is sometime so large as to fall down and produce Prolapsus ani —

This disease occurs also in children and is very painful — when it is produced by descent of a tumor it is cured by extracting the tumors — the most effectual mode of curing this disease is by strict attention to diet — soft food should be used, as mush, and a horizontal position should be observed — thus the disease is cured in a few days and does not often return —

+ ~~tie up the~~ the upper part first —

there is often a fissure in the palate long which heals up after the operation — there is sometimes considerable hemorrhage which must be attended to —

vomits have always been useful in giving relief - nausea relaxes the spasm - fish bones are often lodged in the ~~throat~~ and they may be removed often by introducing the finger -

Hare lip - this disease is always situated in the upper lip, with very few exceptions - sometimes there is but one fissure but often there are two - in children this disease renders sucking the mothers milk impossible - we should pare off the ends of the fissure and unite the part by suture - when a tooth projects, remove it immediately - the operation in children should be done ~~as~~ very soon - in paring off the sides of the fissure we must do it completely and cut the angular part out entirely - you should always be provided with pins, the head of which must be silver - the point should be steel and should be moveable with ease -

The wound made by paring the edges of the fissure soon heals - the edges are to be cut with sharp scissors. the angle must be cut out entirely - then the sides of the wound are to be placed accurately together - then pass one of the pins and tie some thread round it to secure it - then pass another pin and secure it as before - the thread should be passed over the pin - after 4 days the sides of the wound adhere by union by the first intention - the thread acts ~~to~~ as a piece of sticking plaster - thus a handsome lip is left - the pins should be removed in 4 days - the ligatures may be left -

Amputation becomes necessary in cases of compound fractures where there is great laceration it is always best to amputate immediately — great hemorrhages often occur in compound fracture and this in some cases is an argument in favor of amputation —
another case in which amputation is necessary is where there is laceration and wound of a limb, without fracture —
amputation is sometimes necessary in case of a limb being partly torn off — the remaining part being ragged, it is best to take them off by an operation — mortification of a limb in some cases requires an operation but the limb should not be taken off until the mortification has stopt — where mortification takes place ~~round~~ in an extremity, amputation is unnecessary, because the soft part slough away and the bones merely to be cut off — White swellings often occasion caries of the bone, hectic comes on and it's necessary to take off the limb — this should be done even where diarrhoea existed, night sweats were violent and the symptoms all discouraging — I never saw a death where amputation was performed under such circumstances —
amputation is called for in case of large exostoses of the bones — Another cause requiring amputation is an extensive caries — There is a disease called Fungus Hematodes which occurs in the extremities and resemble cancer — when this exists in a joint, amputation must be performed — Sometime amputation is necessary on account of large

To remove a Metacarpal bone defect on each side of it pin the angles of the fingers next it — then introduce the Metacarpal saw and cut away — (afterwards) close the wound & keep it so with Emp adh-

tumors forming on a limb. I have seen such cases — I have extirpated the tumor in the first place, but the same kind of disease always followed spreading much larger than the original tumor — such cases require amputation —

Lacerated wounds call more for amputation when a joint is concerned in the injury —

We are seldom called to amputate a finger — it is best done at a joint — a scalpel is the best instrument — first cut thro the skin and then cut the lateral ligaments — the inflexion are of little importance but may be easily taken up if necessary — but a piece of lint on the end of the finger generally stops the hemorrhage — The incision being made below the joint, skin enough is left to cover the wound and you apply Emp — adh — over the part — It is seldom that we are called to remove a Metacarpal bone —

<u>Amputation of the Thigh</u> — it is necessary to have a tourniquet, bandages — a large knife, which must be very sharp — a scalpel — a retractor — next a saw — sponge, warm water, ligature, needle, tenaculum — linen with cerate, tow and bandages — have at hand some wine & water to give the patient when the arteries are tied up — before the operation give the patient a dose of Laudanum — next apply the compress bandage high up — next the tourniquet — to stop the circulation of the blood — an assistant must grasp the limb and pull the skin upwards — then cut through the skin down to the muscle — then with a scalpel dissect the adipose membrane from the muscle a short away and turn the skin back — then with the large knife cut thro the muscles down to the bone — next apply the retractor to pull back the muscle — next divide the bone

Operation for amputation of the leg

The patient being properly secured apply a tourniquet over the femoral artery to stop the circulation of the blood. Then an assistant is to seize the leg at the knee and pull up the skin. Then the surgeon is to take the large knife and cut thro' the skin with an oblique incision, that is the incision is to be carried lower down on the ~~outside~~ posterior of the leg than ~~before~~. The skin is to be separated with a scalpel from the cellular membrane and turned up towards the knee; then the muscles are to be divided down to the bone; then with a Knife for that purpose the muscular flesh between the tibia and fibula is to be divided; then apply the retractor by which the flesh is to be drawn up towards the knee; then with a saw divide the bones; take up the vessels, clear the stump and apply dressings as in Amputation of the Thigh –

* called a Catling

then wash the stump with warm water then I tie up the femoral artery by passing a needle through the flesh round the artery — if any other arteries are cut take them up — then ~~cond~~ loosen the tourniquet to let the blood flow — then take off the compress band — wash away all clots of blood from the stump then apply a bandage above the pelvis and bring it down the thigh — then draw the sides of the stump together with tape — adh so that the edges of the wound will form an angle from side to side — I always leave a part of the wound unapproximated — leave the ligature from the artery out at the edge of the wound — next apply tow to the stump with cerate spread on it — then apply tow and continue down the roller from the thigh over the end of the stump — then the tourniquet should be placed loose on the limb —

— Feby 23 1810

<u>amputation of the Leg</u> — In addition to the instruments mentioned, some others are necessary — as a sharp knife, and a pair of pincers of a large size — we may amputate either below the knee joint or above the ancle joint — the former is much the best method, because the limb is afterwards more useful to the patient — the operation performed — the stump is to be cleaned with sponge & warm water and the parts are to be brought into contact — the operation is the same as that of the thigh nearly —

Venereal disease – It is produced by a poison formed in the organs of generation and it's a communicable disease even without the rupture of the cuticle – though it excites inflammation yet that inflammation is not really necessary to the disease – Its primary symptoms are Gonorrhoea and Chancre – some add Bubo – it has been discussed whether these result from the same cause or whether they are all the same poison – The usual course of Gonorrhoea is independent of all other symptoms – it is attended with a disagreeable pain called Chordee – Mr Hunter says that Gonorrhoea does now & then produce Chancre & Syphilis –
Persons differ extremely in their ~~susp~~ susceptibility to this disease – Several men may be connected with a woman – all of them but one may have the venereal disease from her, and that one may not be affected – it appears that syphilis is nothing but protracted Gonorrhoea – If there be one case in which Gonorrheal matter produced syphilis, it is sufficient to establish their identity – and many such cases exist and are recorded – Dr doctor related cases in which Gonorrheal matter produced Chancre – Mercury is seldom necessary in Gonorrhoea – but in Lues venerea this medicine must be used – When I see Gonorrhoea attended with large discharges and Chancerous ulcers I can easily distinguish them – I assert that Gonorrhoea & Chancre are derived from the same source & are the same –

 February 26th 1810

Gonorrhœa is a discharge of matter from the urethra - in males the glans prepuce is often affected - in women the vagina is affected also the urethra & - the disease appears after contact in 3 days and from that to 3 weeks or longer - two or 3 days commonly elapse before the disease shows itself - some have thought that the various grades of virulence were indicated by the appearance of the disease sooner or later - but this is not a correct hypothesis - sometimes there are no premonitory symptoms - but there are often precedingsigns of inflammation - Gonorrhœa does exist without ulcer in the urethra - Chancres may exist in the urethra at the same time that Gonorrhœa is present - it is sometimes difficult to distinguish Gonorrhœa from other discharges - itching begins at the orifice of the urethra spreading over the glans; inflammation comes on - pain and a scalding in making water - sometimes the discharge is the first symptom in some the discharge is preceded by pain and difficulty of making water - excoriation of the orifice of the urethra and hemorrhage from the glans sometimes comes on - abscesses frequently form in the urethra and make fistulous sores - erections of the penis occur called Chordee - the running is commonly white or yellowish and thick - at other times it is greenish and very thin - the glands of the groin sometimes inflame and swell - the urethra mostly inflames at its orifice but this frequently pervades the whole course of the urethra to the bladder and gives great pain - where the discharge of matter is great the glans penis are supposed to contribute to the discharge also Cowpers glands - Inflammation often attacks the prepuce forming Phymosis -

The penis is sometimes subjected to a curvature - this lasts long in some cases - the inflammation often ends in Gangrene -

Cure of Gonorrhea - We are often called onto give immediate aid in this disease - it is in some instances possible to cure in a few days - sometimes we are baffled for many months - if the disease does not extend far into the urethra we may cure in 6 a 8 days - I have known one injection perform a cure - where the disease deeply affects the urethra we will find it difficult to cure in a short time - there is no venereal affection so deceitful to the practitioner as Gonorrhea - from what I have said you might suppose that syphilitic remedies should cure gonorrhea, but this is not the fact - sometimes the disease cures itself - mercury is now laid aside in this disease - demulcent medecines have been used - also evacuants according to the notions of practitioners as to the nature of the complaint - the object of demulcents is to blunt the acrimony of the matter discharged - evacuants are sometimes very necessary - bloodletting is not always necessary - Purges of an active kind should be used - an entire abstinence from spirituous liquors - exercise should be very moderate and all irritation avoided - when the symptoms are violent use opium and other anodynes - there are some constitutions which get worse by the use of evacuants - and here we find Bark serviceable - demulcent medecines as flaxseed tea &c - are useful - the latter must be taken in large quantities - nitre may be used to promote the discharge of urine - Bals. Copaivi may be given to 20 or 30 gts 3 or 4 times a day - x gr of black vomit may be given -

Local remedies are various injections and bougies — many cases have been cured by the above named medicines — but we must not depend solely on these — The injections are various — mucilaginous mixtures and olive oil are often found useful — Assume as a patient consults you with a discharge from the Urethra, examine him to see if much inflammation exist — ℞ Sulph Zinc gr v — Acet. Plumb gr 8 — Aqua ℥viij m ft injectio — This is strong enough to begin with — let the patient use moderate exercise and if inflammation supervene, bleed your patient — very disagreable effects often follow the use of too strong injections — a solution of alum in water is a good astringent, also a solution of oak galls — Where inflammation runs very high, the mode of treatment is different — I have known the free use of wine increase the violence of the disease in this stage use leeches — mucilaginous injections be give opium at night either by the mouth or in the form of Glyster — 60 drops of Laudanum with ℥ij of water or starch and water make a good injection — barley water may be thrown into the bladder by means of a catheter introduced into the urethra — I use the following — ℞ Calomel ʒi G. arabic ℥ss — Aqua ℥vi — Laudanum ℥ij — M ft injectio — If this be too irritating, omit the Calomel — An occasional symptom of Gonorrhea is swelled Testicle — This depends on a suppression of the discharge — the discharge should be restored by injections — the patient should lie down — wear a suspensory bandage — bleeding & purging — leeches to the scrotum — poultice of linseed oil mixed with lead water — emetics have removed the swelling of the Testicle — give opium to alleviate pain — the spermatic cord is often very sore —

'~~Chorter in~~ women!!!! – the ~~dickins~~ that
~~much fancy sight. rally in~~

there is pain in the back – nausea & vomiting often comes on – sometimes swelled testicle comes on while the discharge continues free – but the discharge soon ceases – introduce bougie – some recommend the introduction of Gonorrheal matter to the urethra –

Gonorrhoea in Women – it is often difficult to be certain that women have this disease – the discharge commonly comes from vagina only – but sometimes it comes from the urethra – in this case a burning comes on – the cure is nearly the same as in men – astringent injections cannot do harm – cleanliness should be observed – where the disease is violent, use Tinct. Cantharides internally – when the discharge ceases women are supposed to be well, but this is not always the case – the discharge very often returns – after all the virus is removed, an obstinate discharge called Gleet often remains –

Gleet – is a preternatural discharge from the urethra in men and the vagina in women while no inflammation exists – it is merely an increased secretion of a natural discharge – Tonics are almost always proper in these cases – I have seen very use of Peruv Bark very successful – Purges have succeeded – if the stimulating plan fails resort to astrs – Bals. Copaiv has been used in Gleet – but the Resins are as good as this – the cold bath is sometimes very useful – Tinct. Cantharides is one of the best remedies – use it at first in very small doses – ℞ Tinct Cantharides ʒ ss – Aqua ℥xvi – M ʒ ss 3 times in diet – local remedies are Bougie and injections – the injections should be varied – ℞ Sulph Zinc Acet Plumb – ʒ ss – Corrosive Sublimate 1 gr – Aqua ℥ss – M ft inject – use the injection some time after the discharge ceases –

 February 20th 1800

Chancre - some persons are predisposed to chancre more than others - persons in whom the prepuce is short are less subject to chancre than others, because the matter is more easily wiped off - those who have had venereal ulcers are liable to have them again - venereal ulcers may be formed on the lips by kissing a person under the affecting venereal disease - the seat of chancre in man is on each side of the frenum - chancres may be formed by the contact of venereal matter to an ulcer - sometimes chancres will appear 48 hours after contact, and sometimes not before 3 or 4 weeks - the number of chancres varies considerably - a pimple first forms with a little hardness attended with pain - excoriations occasionally occur and ulceration follows constituting chancre - sometimes the inflammation extends and diffuses - chancres never cure themselves - use mercury to prevent the contamination of the whole system - it is possible to cure them with local remedies - Caustics are used - mercury will cure often without the aid of any local applications - the best practice is to use both local & general remedies - sometimes the constitution requires the use of Tonics - Mercury alone does not perform a speedy cure in every case - this is an objection to this remedy - an objection to local remedies is the danger of contamination to the system by absorption or sympathy - it is always best to destroy the surface of chancre by means of caustic -

The Caustic should be scraped at the end to a point - it should be applied frequently until the surface of the sore is removed - when this is the case apply lint over the surface - in old chronic Chancres where the sores spread rapidly. the knife must be used to extirpate the part - Mercurial ointments have cured chancres by their escharotic powers - where Calomel is used externally mix it with mucilage or oil - vary the ointments if one does not succeed - The Ointment of Precipitate is used - mercurial ointment - washes of different kinds are useful where Chancres are so situated as not to be reached easily with Caustic - these washes are of vitriol copper &c - when we believe inflammation is coming on, advise rest & antiphlogistics - chancres under the prepuce are treated with corrosive sublimate washes - 1 gr of sublimate to ℥ i Aqua - this is to be injected - Mucilage may be used instead of the water - Opium may be added where the pain is great - if these increase the inflammation lay them aside - where the Phymosis is violent use lead water - an operation is sometimes requisite - if the swelling is so great that no knife can get under the prepuce, dissect thro' it carefully - sometimes it is necessary to take off the whole penis Calomel should be used to salivate - the Blue Pill is useful - Phos Mercury is used by some - secrecy is an object of some consequence of this disease - when the Mercury affects the mouth leave it off and again renew it -

venereal warts are subject to chancre — they are sometime the consequence of Gonorrhea — they occur in different places as on the thighs &c — they are to be removed by ligature and the parts are to be touched with Caustic — this prevents them from growing a second time — electricity has destroyed warts —

Bubo is a swelling of the lymphatic glands excited by venereal poison absorbed. they occur in various situations — sometime the constitution is contaminated without the formation of bubo — Chancre is often the cause of bubo — it begins with pain and a small tumor in the groin — the tumor enlarges and advances rapidly to suppuration — they are at first circumscribed and moveable under the skin but not so afterwards — it is always best to attempt to discuss them first — local remedies must be aided by Mercury internally used — resolution cannot always be accomplished — use all the remedies proper for inflammation — the bubo may be rubbed with Mercurial ointment, also the thigh — the quantity of mercury necessary to cure is very uncertain — apply leeches and afterwards blisters to the tumor — give cathartics daily and advise low diet — we cannot always prevent the suppuration of bubos — we should never cut down deep to open bubos — leave them till the skin is thinned — when they are to be opened if the abscess is small use the lancet — when the pus is evacuated, unite the parts — but if all the pus be not evacuated apply poultices — use caustic —

Sea bathing does good in Buboes — Tonics of various kinds are useful in some cases — if scrophula is suspected exhibit Cicuta —

Confirmed Lues follows the neglect of chancre

Bubo &c — the periosteum, fascia, bone & are affected — first the Tonsils are affected — refer you to Hunter on this disease — sores appear in the throat, mouth &c — mercury is said to do little or no good in this disease — but Hunter says it may be useful — the venereal shows itself about 6 weeks after mercury has been used for chancre — blotches appear on the skin, the tonsils are inflamed, then ulcerated — the venereal ulcer in a tonsil looks as if a part of the tonsil had been scooped out — the throat became very sore and the head is affected with pain, languor, dejection of spirits, fever &c — copper colored spots affect the skin — sometimes a swelling of the skin takes place under which a grey matter is formed — the cure of the venereal sore throat and blotches is effected by mercury in friction and pills — mercurial fumigations are used — Nitric acid has been advised in the venereal disease — I have seen it do good ℞ Nitric acid ℥j G. arabic ℥ij — Aqua ℥xij the ft mixture — dose ℥ss 3 times in die —

Nodes appear on every bone in the body, but most often on those which have little covering —

Caries is often a consequence of venereal disease — many affections result from this disease, most of which are cured by Caustics —

Ophthalmia and deafness have followed the venereal disease — it likewise has produced loss of hair — Hunter denies that venereal poison can produce any peculiar effects on the system —

In Lues venerea, diet should be attended to the food should be changed and a change of situation from the city to the country is very beneficial — when nodes suppurate and form abscesses, open them — and treat them as other abscesses —

March 1st 1810

Stricture of the Urethra — by the term stricture is meant a diminution of the canal at a particular part — this is mostly at the bulb — sometimes in the membranous part — the stricture is sometimes permanent sometimes spasmodic — In the permanent stricture the stream of water is lessened in size — the water sometimes flows as usual — it is not always attended with pain — sometimes pain attends every discharge of urine — the urethra is sometimes violently contracted when spasms attend the stricture, the urine is quite suppressed — intemperance produces this effect — violent exercise — venereal gonorrhoea treated by astringent injections often is followed by stricture — but this disease may take place without any venereal disease — The spasmodic stricture is not so violent as the permanent stricture — it is always best to examine bougies after withdrawing the penis from affords a model — I use bougies tapering gradually to a point — I make them of linen dipped in wax and rolled up to a small size — the body of the bougie should be thick & firm —

* Those made of new linen are less liable to tear –

o I have my caustic bougies constructed with a cap on them to prevent injury in passing –

× The penis to be held at right angles to the body –

+ This lancet is guarded in a cannula –

Imported bougies are made of old linen - those which I use are made of new linen - for examining the stricture use a bougie with a blunt point, for dilating the canal use a sharp pointed one - the bougie should be left in for some time - when bougies are first introduced they give great pain - after a bougie of small size has been admitted use a larger one - the patient should pass the bougie daily for 3 or 4 weeks - sometimes the stricture is so narrow that difficulty attends the passage of the bougie - when the stricture is so great as to prevent the passage of urine it creates ulceration behind the stricture - this ulceration opens externally and creates Fistula in Perineo - this stricture is obviated in some cases by caustic - this is to be introduced by fixing a piece of caustic to a bougie - in order to open the urethra before passing this bougie, introduce a larger bougie - the caustic bougie is then to be put in sweet oil and introduced, while the patient lies on his back - the caustic may be continued from 2 minutes to a quarter of an hour - it should not be kept in more than 2 minutes at first repeat the use of the caustic every 8 or 4 days - when the stricture is seated at a before the bulb of the urethra it may be safely divided by a lancet - when this done introduce an elastic catheter - to remove spasm, a warm bath, tobacco, opium &c has been used - read Home, Hunter &c -

Suppression of urine - is attended with violent attempts to discharge the contents of the bladder, which prove unavailing - the size of the bladder gradually increases if relief be not given - mortification sometimes follows - the causes of suppression are various - when we introduce bougies to discharge the urine, all violence must be avoided in passing these instruments -

℘ The reason for giving a piece of Bougie to the Catheter is because the latter will seldom pass of itself on account of the bluntness of its point –

I prefer the Pubis & Rectum, the latter always where the patient is very fat –
a Curved Trocar is used – the canula is withdrawn when Rectum is punctured and a Catheter passed – this to remain 36 hours after which it may be removed – When you puncture above the Pubis before the urine is all discharged pass a female elastic Catheter into the Canula – else the sharp end of the Canula will injure the Bladder

when the suppression arises from swelling of the Prostate gland the urethra is bent considerably and the bougie passes with difficulty - it sometimes passes easily by being first bent - sometimes it succeeds by retracting the stylet when the ~~bougie~~ catheter arrives at the neck of the bladder - I prefer the Gum elastic to the silver Catheters - if such remedies fail use the warm bath - opium in glysters or by the mouth - another instrument for drawing off the water is an elastic ~~catheter~~ with a piece of bougie secured to its end

Cp

when it is impossible to draw off the water in this way the bladder must be punctured externally above the os pubis, at the perineum or at the rectum -

+

Default - Chirurgical Journal referred to -

Calomel and opium have been recommended as the best internal remedy in suppression of urine - with this I use the warm bath -

= Finis

~~Mr Abercrombie's~~ Dispensatory ~~Dose~~ at a Dose

is useful in ~~suppression~~ Urine ~~Clysters~~ of all kinds

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